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Original Articles.

EYE COMPLICATIONS OF SMALLPOX.

SOME OBSERVATIONS DURING THE RECENT EPIDEMIC IN CLEVELAND.*

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CLEVELAND, OHIO.

The recent epidemic of smallpox was the severest in the history of the city, and has seldom been equaled in the number of cases and in malignancy in recent times, in civilized countries, as will be seen by the accompanying chart, which shows cases and deaths, prepared by Dr. Probst, secretary of the Ohio State Board of Health. The total number of cases for 1902 was 1,248, with 224 deaths. The death rate was 17.9 per cent., and, as Dr. Probst well said: "This was the genuine old-fashioned smallpox." Many of the cases were of the most malignant character and exceedingly contagious, unlike the mild form of the disease which hitherto prevailed.

The cause of this widespread epidemic is not far to seek. During Dr. G. C. Ashmun's incumbency of the Cleveland health office, from 1880 to 1891, the rule requiring vaccination of all school children was rigidly enforced; but since that time it has been followed more in the breach than in its observance, consequently a large percentage of the population were unprotected by vaccination.

The general indifference to vaccination was fostered by a few cranks, led by a certain doctor of divinity, who organized an anti-vaccination society, and the vaporings of this crank and his followers were kept perennially before the public in the newspapers.

From 1898 to 1901, inclusive, an epidemic prevailed in Cleveland of a mild variola. In 1898 there were 48 cases and no deaths; 1899, 475 cases and 3 deaths; 1900, 993 cases and 16 deaths, and in 1901, from January 1 to August 23, 1,230 cases and 20 deaths, making a total of 2,746 cases and 39 deaths during the four years. The mortality was less than .015 per cent.

During all these years there was a constant clamor in the newspapers about the evils of vaccination. Unfortunately, during the summer of 1901 some poor virus was used, and many badly infected arms developed. Several cases of tetanus were reported. A particularly sad one was that of a beautiful young lady who died of tetanus from the result of vaccination performed by her brother, a young physician.

This epidemic was terminated by a vigorous policy of vaccination and quarantine by Dr. Heimlich, who occupied the position of health officer for a short time, but whose strenuous methods did not meet the approval of Mayor Tom Johnson (unfortunately, the mayor is immune, having had smallpox when a boy). On one occasion, it is alleged, he said that he did not believe in vaccination, and no member of his family should be vaccinated with his consent.

Dr. Heimlich was deposed, and Dr. Martin Fredrick installed as health officer. He immediately commenced a vigorous crusade of house-to-house disinfection with formaldehyd.

Dr. Fredrick is a most efficient officer, a thoroughly educated gentleman, an indefatigable worker, with great patience and perseverance. He had placed at his command every resource to combat an epidemic without vaccination. A more competent man for such an undertaking could not have been found, and his complete and disastrous failure ought to be sufficient to close the mouths of every anti-vaccinationist in the country.

There ought to be some way of disseminating this failure of Dr. Fredrick's disinfecting crusade in 1902 as wide as the reputed success of his efforts in 1901, which did not prove anything, as the epidemic had already been stamped out by vaccination before he assumed office. There was not a single case of smallpox in Cleveland when Dr. Fredrick took charge of the health office. The paper he read before the Academy of Medicine on "How We Rid Cleveland of Smallpox"[1] was unfortunate in its title, to say the least.

The antivaccinationists quoted him far and wide as being opposed to vaccination; but a careful perusal of his original paper reveals that he believes thoroughly in vaccination, and ought not to have been misrepresented. His protest was justly against the use of impure virus.

During the entire epidemic of mild smallpox, in which 2,746 cases were reported, not a single one of severe eye complications came under my observation, and I have not heard of any cases among my confrères.

During the recent epidemic there have been a number of cases of serious eye complications, and I wish to put on record the present condition of some of these unfortunate patients.

CASE 1.—Mr. O. N., age 30; superintendent. Large adherent corneal opacities of both eyes. Left eye light preception, but no hope of improvement. Right eye good light preception, a small band of clear cornea at outer side. It is possible but not probable that an iridectomy can be made at some future time, giving a little useful vision.

CASE 2.—Mrs. K. S., age 26; housewife. Large perforating ulcer of left eye, including entire cornea, followed by iridocyclitis. Enucleated to relieve pain.

* Read at the Fifty-fourth Annual Session of the American Medical Association, in the Section on Ophthalmology, and approved for publication by the Executive Committee: Drs. J. A. Lippincott, Frank Allport and John E. Weeks.

1. Cleveland Medical Journal, February, 1902.

CASE 3.—B. K., three-year-old girl. Large ulcer involving more than half of cornea of right eye. Staphyloma as large as a bean, with pressure bandage became smooth. Eye quiet, a little clear cornea above, but no useful vision.

CASE 4.—T. K.; laborer; age 33. Total staphyloma of cornea of right eye. Iridocyclitis. Enucleated to relieve pain.

CASE 5.—W. A. H.; mail clerk; age 27. Large ulcer of cornea of right eye including nearly entire cornea, but not perforated. Pupil moderately dilated. Hypopyon. Considerable pain. Ulcer healed very slowly. Counts fingers, but can not hope for much improvement.

CASE 6.—E. P., school girl; age 12. Small ulcer of cornea of right eye. Made little complaint of eye until after discharged from hospital. Several days afterward suddenly developed intense panophthalmitis. Phthisis bulbi.

CASE 7.—G. S., school boy; age 10. Ulcer of cornea of left eye. Panophthalmitis developed before discharged from hospital. Phthisis bulbi.

CASE 8.—J. L., age 27; bricklayer. Left eye ulceration of entire cornea. Immense staphyloma developed so that lids could not be closed and became painful. Enucleated.

Right eye ulceration of almost entire cornea. Anterior chamber full of pus. Saemich operation. Fistula of cornea. Still under observation. Small portion of clear cornea. May be able to make iridectomy and secure a little useful vision, but very doubtful.

CASE 9.—R. F., bookkeeper; age 28. Large ulcer of cornea of right eye. Not perforated. Opacity of cornea at present time, including lower 2/3 of cornea. With pupil dilated, vision 10/200.

CASE 10.—T. R., driver of delivery wagon; aged 19. Ulcer of lower half of cornea of right eye not perforated. Vision six months later 20/200.

CASE 11.—F. M., press hand; age 23. Large perforating corneal ulcer of right eye. Discharged from hospital Nov. 1, 1902. At present writing, March 26, 1903, adherent scar involving at least 3/4 of the cornea, with small fistula just above where the pupil ought to be. Light perception. Still under treatment.

CASE 12.—B. M., four-year-old girl. Discharged from hospital with small corneal ulcer of right eye. Subsequently developed panophthalmitis. Phthisis bulbi.

The following notes were made by Dr. Hartzell. The patients have not been seen since discharged from hospital.

CASE 13.—John S., age 26. Discharged from hospital with panophthalmitis of left eye.

CASE 14.—Mary P., age 6 months. Discharged from hospital with small corneal ulcer of left eye.

CASE 15.—Henry B., age 44. Left hospital with small ulcer of left eye.

CASE 16.—Louis A., aged 2 years. Discharged from hospital with small ulcer of left eye.

CASE 17.—Jennie J., age 28. Discharged from hospital with large ulcer including entire cornea of left eye, and almost entire cornea of right.

CASE 18.—William B., age 18. Discharged from hospital with small ulcer of cornea of left eye.

CASE 19.—Gilbert B., age 30. Discharged from hospital with perforated corneal ulcer and iridocyclitis of left eye.

CASE 20.—Benjamin C., age 55. Discharged from hospital with panophthalmitis of right eye.

CASE 21.—Sadie G., age 30. Discharged from hospital with small ulcer and iridocyclitis of left eye.

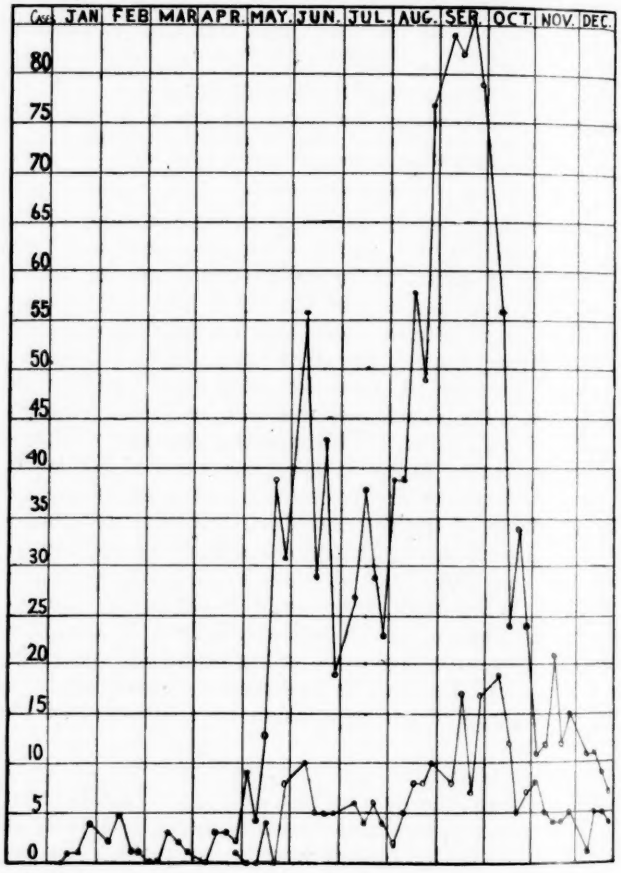
CASE 22.—Frank B., age 24. Discharged from hospital with small ulcer of right eye.

CASE 23.—Walter V., age 18. Discharged from hospital with large ulcer of cornea of right eye and severe ulcer and iridocyclitis of left eye.

No records are available to determine accurately the total number of cases in which the eyes were seriously involved. But I requested Dr. Homer J. Hartzell to make a note of the cases that came under his service at the Detention Hospital. Dr. Hartzell admitted and treated 425 cases. He had 16 cases of late eye involvements, 13 of one eye and 3 of both, or about 3¾ per cent., which would give us between 45 and 50 cases during the entire epidemic. I think this is approximately correct.

The severity of this infective process may be better appreciated when we recall that of the above 23 cases, 4 are blind in both eyes, with little hope of improvement; 8 have either been enucleated or atrophied from panophthalmitis; 6 are blind in one eye, but the form of the eyeball is preserved. It is probable that several of these will have to be enucleated later. Three have vision of less than 20/200, and not more than 5 have vision better than 20/200, and 2 have corneal fistula, and are still under observation.

In view of this discouraging array of blind and damaged eyes, notwithstanding our supposedly newer and



Smallpox in Cleveland, 1902. Upper curve, cases; lower curve, deaths.

better methods of treatment, we can readily believe the statement of the older writers, that one-third of all the blind people in Europe before Jenner introduced vaccination were due to smallpox.

All these patients had severe confluent variola. In not a single case could be elicited a history of having been successfully vaccinated. In all of the cases attention was called to the corneal lesion relatively late in the disease, about the end of the second, or beginning of the third week, and in a few cases much later. Case 12 was discharged from the hospital with a small ulcer of the cornea, but three weeks later panophthalmitis developed.

A number of these cases were examined bacteriologically and streptococci were always found. Occasionally a mixed infection, with staphylococcus, was present.

Most severe cases of variola have a conjunctivitis and great swelling of the lids early in the disease, and fre-

quently it is impossible to open the eye so as to see the cornea for several days. The fear that destructive corneal lesions may be transpiring unobserved beneath the greatly swollen lids is not often realized; for when the lids can be first opened the cornea will be found clear. The first indication of corneal complications will usually be noticed several days later, after pus and crusts have been forming, and it is quite certain the infection is carried into the eye from the skin on the fingers, handkerchief, dressing, eyedroppers, or directly from crusts on the edges of the lids.

When the house physicians, nurses, attendants and patients at the detention hospital became fully cognizant of the importance of this observation as to the source of the infection, and every possible precaution was taken to disinfect the structures around the eye, there was an appreciable falling off in the number of eye complications.

The patients, however, who suffered most severely were those who barely escaped with their lives, and, doubtless, one reason there are not more blind from smallpox is because so many of the confluent cases die. The vitality of those who survive is so lowered that the cornea sometimes melts away with very little attempt at repair, as I have sometimes seen it do in severe cases of scarlatina, typhoid fever, and other severe and depressing diseases.

In view of my observations during this epidemic, I can not agree with Mackenzie's[2] statement: "Secondary variolous ophthalmia seldom leads to destruction of the cornea unless the case is altogether neglected." Our cases were not neglected. Resident physicians were in constant attendance, the best of trained nurses were employed, oculists were frequently consulted and patients were given constant and careful attention. One of the resident physicians said: "More time and care was devoted to the eye cases than all the others combined."

Doubtless, there were mild cases of keratitis that escaped our notice, such as described by Dr. Edward Jackson[3] in his admirable paper. But they must have been rare. No case of primary infection of the conjunctiva, such as reported by Dr. E. P. Morrow,[4] came under our observation. I am indebted to Dr. D. B. Smith for the report of the following case: Miss C. K., nurse at the detention hospital, was vaccinated a few days before taking the position, and had a very much inflamed arm, with several characteristic pustules. On the mucous membrane of the right upper eyelid, just at the transitional portion, a perfectly well-defined ulcer appeared. The lid was swollen greatly, and the diagnosis of vaccine pustule was made. Patient made a perfect and uneventful recovery. All of the cases began relatively late in the disease, and were due to a secondary infection, although it is quite possible that there may have been some slight abrasion of the cornea as the result of a primary lesion, thereby permitting the entrance of pathogenic germs later.

Early in the epidemic, while laboring under the belief that the eyes were destroyed as the result of a primary lesion of the conjunctiva or cornea, cases were treated with instillations of 1 per cent. solution of nitrate of silver as a prophylactic, but it seemed with deleterious results. Then protargol formalin and other disinfectants were used, with no better success. Later, subconjunctival injections of bichlorid were used in several cases without benefit. Fewer cases of corneal complications developed, and our cases progressed better when a routine practice was adopted of frequent washing of the face and lids with 1/4000 bichlorid and flooding the conjunctiva four or five times daily with saturated boric acid solution, and on the first evidence of corneal complications an instillation of 1 per cent. of atropia sulphate two or three times daily. The later treatment of these cases was in no way different than that of corneal ulcers from any other cause.

In conclusion, I wish to observe:

1. In view of the growing sentiment against vaccination almost any community is liable to experience an epidemic as disastrous as that through which Cleveland has just passed.

2. The eye complications of smallpox are greatly to be feared. The dangerous corneal complication is a secondary infection, commencing about the twelfth day, but many come much later.

3. The infection in the Cleveland epidemic was a streptococcus one, and different in no way from similar infection of the eyes of a patient already much exhausted from a serious disease.

4. No specific prophylactic treatment has been found, and the best that can be done is to keep the face and eyes in as nearly an aseptic condition as possible by frequent washing and the use of such antiseptics as will prove the least harmful to the eye.

122 Euclid Avenue.

2. Diseases of the Eye, p. 433.
3. Denver Medical Times, December, 1901.
4. Ophthalmic Record, July, 1902.

DISCUSSION.

DR. J. F. FULTON, St. Paul, Minn.—I did not know until a recent epidemic that the eye complications of smallpox were so common. During a recent epidemic we had the same fight in our legislature for the enforcement of vaccination. I had under my care two cases of central ulceration of the cornea. They occurred during the stage of convalescence and resulted in permanent opacities, and it will be necessary to do an iridectomy to secure an improved vision. They were treated on the same line as we treat all ulcers of the cornea. There is a question as to the nature of the ulcer—whether it is the eruption of smallpox or an ulcer due to the run-down condition of the system. It is quite possible that it may be the same eruption as that on the skin.

DR. LEARTUS CONNOR, Detroit—It is a question whether the eye complications were due to the general eruption or to streptococcic infection. It would seem in these cases that it was due to the infection, and if so, measures can be taken to prevent it. We have had some mild cases in Detroit, but I have not heard of an eye being lost from this cause. It may be due to the fact that at periodical intervals the whole city has been thoroughly vaccinated. We have lately been made to believe that this was illegal, but formerly it was not considered so, and general vaccination prevented an epidemic. I am convinced that in this, as in allied diseases, we shall fail of best results until we teach the people that vaccination is absolutely necessary. Dr. Baker's observations increase the force of our argument. If we can show that even though the lives of patients are saved, they may be blind, or partially so, we may be able to get the laity to listen to us. The only thing we can do is to promote organization and teach the people such facts as these presented to-day. How much the discovery of the smallpox organism by Dr. Councilman will affect this matter is still undetermined.

DR. B. H. MANN, Texarkana, Ark.—I have treated perhaps five or six cases of corneal ulcer following smallpox, with loss of eye in two cases. Treatment seemed to have no effect whatever.

DR. JOHN A. DONOVAN, Butte, Mont.—As to the question of primary or secondary infection being cause of ulcers, in an extensive epidemic two years ago I saw some cases where primary eruptions occurred on the cornea simultaneously with the skin. These all healed readily when treated with boracic acid wash and yellow oxid ointment. These severe ulcers with

iritis, etc., I treated were all due to secondary infection. Light cautery punctures in the margin of healthy tissue around the ulcer is the most efficient treatment.

DR. R. W. MILLER, Los Angeles, Cal.—The statistics are indeed instructive, and come to us with a great deal of force. They have the merit of freshness, and may be more helpful to us in bringing the laity to a realization of the dangers of smallpox and the benefits of vaccination than the older statistics. We have to go back but a few years in order to obtain abundant statistics which should convince anybody. In spite of this, however, we find people opposing vaccination. In Los Angeles a few years ago mass meetings were held by antivaccinationists opposing vaccination, and these meetings were headed by the editor of one of the daily papers, who refused to have his own child vaccinated so that it might continue to attend the public school.

As suggested by Dr. Connor, we may hope for better things when the profession is more thoroughly organized. The adoption of suitable resolutions and the bringing to bear of concerted influence on the legislatures and health boards will enable us to accomplish more than we have done in the past. There is no question as to the growing sentiment against vaccination in this country, and the only thing perhaps that will convince the public will be a fearful epidemic of smallpox.

I have seen but few of these cases, but I think with Dr. Donovan, that if the ulcer is limited, the cautery is the best means of treatment. As to the applications of medicines, we can often accomplish more by frequent cleansing with the milder agents than by the more irritating agents.

DR. OSCAR DODD, Chicago—I have seen several cases in Chicago at a late stage, after the corneal lesions had healed. Our cases were very mild. I would like to ask Dr. Baker if the corneal complications came on during the stage of eruption or are a later infection.

DR. E. P. MORROW, Canton, Ohio—Dr. Baker mentions a case that occurred in my practice.[1] The eye trouble occurred before the general eruption occurred, and I look on it as the inoculation lesion of smallpox. The patient, about two weeks before, had slept with his cousin, who was supposed to have chicken-pox. The next day in shaving himself he used the same mug his cousin used, and probably got some lather into the eye. Seven days before the general eruption occurred he presented himself with a slight conjunctival hyperemia, limited almost entirely to the lower half of the eyeball. There was a decided white spot, 3 mm. in diameter, on the hyperemic area between the corneal limbus and the caruncle, and in the center of this spot a distinct black dot. I sent him home, assuming the trouble to be insignificant. The next day he presented himself with greatly swollen lids, having the appearance of a case of purulent conjunctivitis; on separating the lids, however, there was no discharge. There was, however, a subconjunctival swelling in the lower half of the bulbar conjunctiva, while the upper half of the cornea and conjunctiva were not involved at all. Until the end of the case there was no discharge. On the seventh day he had a general eruption, which proved to be smallpox. The eye went on to recovery, although there was a slight involvement of the cornea. There was haziness of the lower portion of the cornea, but under irrigations with boracic acid and the use of hot fomentations the eye recovered without any serious damage. I believe this to be a case where the conjunctiva was the initial point of inoculation of smallpox.

DR. D. A. THOMPSON, Indianapolis—During the past year we have had a siege of smallpox, and I saw a number of conjunctival cases, one a severe episcleritis. In the confluent form there were ten cases of ulcer, of which four were lost. It was demonstrated in our cases that vaccination plays an important part in mitigating the trouble.

DR. ALLEN GREENWOOD, Boston—It is reasonable to expect that Dr. Councilman's discovery will bring about a new method of treatment, and that we may possibly be able to control this condition as we do the diphtheritic conjunctivitis by an antitoxin.

1. Ophthalmic Record, July, 1902.

DR. F. W. HILSCHER, Spokane, Wash.—I would like to report a case similar to that of Dr. Morrow's, in which there was conjunctivitis near the limbus before the eruption of the disease appeared. I treated the patient about a week before the eruption broke out. It had the appearance of a phlyctenular conjunctivitis. At the end of about a week he seemed depressed and had a little fever and general malaise, and I suspected smallpox, and called in a health officer and turned the patient over to him. It illustrates also the value of isolation. The patient was from just outside the city limits. We had an efficient city official, but a rather negligent county physician; the city remained comparatively free from the disease, and the cases in the city could be traced in nearly every instance to infection from the county outside the city limits.

DR. JOHN E. WEEKS, New York—The discussion has brought out that the affection may sometimes be primary in the eye. I had thought that perhaps in all the cases the infection was a secondary one, and due to the entrance of substances from the lids or brow after abrasion of the corneal epithelium. I have not had experience in the treatment of smallpox, but it seems to me that the use of oily preparations to prevent the scattering of the exfoliations would be of service in preventing secondary infection of the eye; oily preparations, with perhaps an antiseptic added. In regard to the complications that may follow, I have seen cataract as a result of corneal ulcer following smallpox.

DR. ALBERT R. BAKER, Cleveland, Ohio—I believe in all cases the eruption appears on the mucous membrane just as on the skin, and probably in all there was a primary eruption of the mucous membrane of the eye. The eye is so greatly swollen in confluent cases that it is difficult to tell. It is impossible to open the eye to examine it for several days. But for all practical purposes these cases of bad infection are secondary, and the infection is conveyed to the eye by means of the fingers, or in some similar way. We used vaselin, as suggested by the Chairman, in all these cases. As to the primary infection as in Dr. Morrow's case, the only one that in any way resembled that was the case of Dr. Smith, in which there was a vaccine infection carried from the arm to the eye.

The general condition of these eye patients was pitiable indeed. Even with good nursing in many of them you could pick up the crusts from the bed in handfuls weeks and months after the case was discharged from the hospital as cured.

As to the chart, you will observe that it keeps running up gradually until we were having 85 to 88 new cases reported a week, with 15 to 20 deaths. Our health officer was still disinfecting. We were threatened by quarantine by all lake cities, and then our business men became alarmed and called in the State Board of Health, who insisted on general vaccination, appointed 250 public vaccinators and vaccinated over two hundred thousand people within a week, and the epidemic was almost immediately ended, as shown by the chart.

CRAMP OF THE CILIARY MUSCLE DUE TO EYESTRAIN.*

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As every physician should have a knowledge of what is known as professional cramp, a painful spasm of the finger, hand, forearm or arm from excessive use, as is often found in writers, telegraphers, pianists, violinists, typewriters, etc., so should every oculist have a knowledge that certain eye muscles, especially the ciliary, are liable to the same condition when subject to enforced contraction for prolonged periods of time.

No oculist who does much fitting for glasses has failed to notice that, although the greatest care has been ob-

* Read at the Fifty-fourth Annual Session of the American Medical Association, in the Section on Ophthalmology, and approved for publication by the Executive Committee: Drs. J. A. Lippincott, Frank Allport and John E. Weeks.

served in this part of his service, occasionally he will meet a case where it is impossible to obtain satisfactory results and relieve the annoying nervous symptoms that usually accompany refractive error, although under the effects of a cycloplegic the very best possible vision has been obtained. Such patients are usually between the ages of 25 and 40 years, although cases much younger are occasionally encountered.

When the patient returns to us with the complaint that he is not relieved of his headaches or whatever nervous head symptoms may have been attributed to eyestrain, and that his vision has not been improved, we apprehend that a too high or a too low correction may have been made, or that there may have been a slight deviation from the exact angle in the correcting cylinder for the astigmatism, all of which has been carefully gone over, and allowances made from time to time, without appreciable benefit to the patient.

Should the patient have been long a sufferer from the headaches and eye pains which are usual in refractive errors, especially if there is an astigmatism, the correcting lenses may have relieved him for a short time, to some extent, but not entirely, and many of the old annoying symptoms return, although perhaps in a mitigated form. This condition is known as ciliary cramp.

THE CAUSES OF CILIARY CRAMP.

1. An emmetropic eye may have cramp of its ciliary muscle. Too much near-work leads to it. Impairment of the general health will augment it, but the cramp may exist in an emmetropic eye when there is good health from too much near-work.

2. The ametropia conduces to it, especially hyperopia and astigmatism, whether hyperopic or myopic. In mixed astigmatism there is great predisposition to the cramp with a tendency to headaches and eye pains. This may be attributed to the unequal contraction of the sphincter fibers in order to obtain a clear retinal image.

It is well understood that accommodation depends on the contraction of the circular fibers of the ciliary muscle and the elasticity of the crystalline lens. When there is normal refraction of the eye and but an ordinary amount of work for the muscle to perform, and the patient is in fair health and is not suffering from some affection that would impair the general muscular tonicity, the eye performs its functions instinctively—not reluctantly—but with a natural impulse and without effort. If, however, there is an excessive amount of near-work to perform, or there is general impairment of muscular tonicity, although the refraction may be normal or made so by correcting lenses, the ciliary muscle is liable to become cramped from the excessive effort to contract.

If the eye is hyperopic or astigmatic, with these conditions existing, then the ciliary muscle must become inordinately contracted in its effort to perform but an ordinary amount of work. If the eye is myopic and uncorrected, the ciliary muscle, not being called on to perform much service for near-work, soon loses its tonicity for want of action; for this reason should an exigency require that the myopia be corrected to facilitate distant vision, the patient is unable to accommodate for near-work, or if so, very reluctantly and ineffectively. The weakened condition of the muscle, rendered so for want of use, readily conduces to cramp.

In high degrees of uncomplicated and uncorrected myopia there can not be cramp of the ciliary muscle, but it is found in low degrees of this refractive condition and in high degrees, where full, or quite full, correcting glasses are in use. If myopia is corrected early, the ciliary muscle may regain its normal functions, and is then liable to become cramped from overwork, as does that of the emmetropic eye.

I anticipate the fact that there are those who are skeptical with regard to ciliary cramp. They term it hypertrophy of the ciliary muscle. I believe there is hypertrophy of the ciliary muscle, but it is readily diagnosed from cramp.

When there is cramp of the ciliary muscle it is temporarily relaxed by the use of a cycloplegic, and if the patient is subject to headache, due to eyestrain, it is relieved as soon as the cycloplegic has relaxed the accommodation. We have all had patients who were suffering from headache at the time they consulted us, who, as soon as their eyes were placed under the effects of a cycloplegic, found that their headache had entirely disappeared.

In hypertrophy of the ciliary muscle there is no strain and consequently no cramp, for the muscle has become permanently fixed, and, therefore, ineffective as far as contraction and relaxation are concerned. The patient with hypertrophy of the ciliary muscle can usually see well for near-work, because the muscle has become permanently contracted and is fixed for near-work only, but can not see well for distance, and because of the permanent convexity of the lens is practically myopic, and for distance requires a concave lens to make perfect vision. When the muscle becomes hypertrophied and the lens permanently fixed for near-work, the range of accommodation is necessarily very limited, and the patient has passed the point where he suffers from cramp.

I can conceive a hypertrophied condition of the ciliary muscle where the sphincter and radiating fibers may be increased in size and strength and their functions still maintained, to attain which would require a systematic exercise of both sets of fibers, which no ordinary avocation could possibly accomplish.

The cramp of a muscle is an evidence of its weakness. When a muscle is compelled to remain in a fixed position for long periods of time, it becomes weak, simply from the exertion necessary to maintain this fixed position, whether it has been held there by mechanical means, as to allow a fractured bone to unite, or voluntarily, as with the contracting fibers of the ciliary muscle in the act of near-seeing. After the protracted contraction of a muscle, the tendency is to keep more or less contracted, and when through necessity it must relax, pain accompanies the effort.

Cramp of the ciliary muscle is not constant, although the conditions which produce it may be present. As before stated, it may occur in an eye whose refraction is normal, simply because the eye is overworked. One of the first symptoms of ciliary cramp, aside from headache and pain in the eye itself, is that vision for distance is variable. At times the patient may have good distant vision, but on the least exertion at near-work the cramp returns with great severity, and the patient suffers accordingly. It is this tendency of the ciliary muscle to return to its old condition of contracting that gives the oculist so much concern after he has properly fitted his patient with glasses.

TREATMENT.

The treatment which has been most successful with me in cases of ciliary cramp consists of cycloplegics, and for several reasons I believe that those whose effects are transient are much better than those whose effects are prolonged, like from atropin. The first reason is that most patients are compelled to continue

regularly their daily avocations. The second reason is that prolonged relaxation of the muscle is injurious, because long-continued inaction of the muscle will, of itself, have a tendency to weaken it, in which condition it will readily cramp again if the patient is compelled to use the eyes for enforced near-work.

As a transient cycloplegic, and one, too, which will effect thorough relaxation of the accommodation, I am partial to a combination of equal parts of a 1 per cent. solution of homatropin and a 2 per cent. solution of cocain. The cocain seems to augment the effects of the homatropin, besides, its analgesic effects have a special bearing with patients who suffer much, as many do, from the pain attending ciliary cramp.

To relax the accommodation preparatory to fitting for glasses I instill one drop of the above solution in the eyes every ten minutes until five applications have been made. In ten minutes after the last application the accommodation is usually relaxed to its utmost extent, when the fitting may be proceeded with, which must be concluded within two hours, for at the end of this time the cycloplegia usually begins to pass off.

To relieve ciliary cramp, I instill one drop of this solution into each eye on retiring for the night. The patient is usually able to attend his work, whatever it may be, the next morning, should he retire at a seasonable hour. It requires about ten hours for the cycloplegia to pass off, when the muscle will usually be able to perform its functions readily.

I prescribe this remedy daily, at the time indicated, whenever and as long as there is evidence of cramp. Frequently but one eye is affected, when it can be treated alone. My rule is to use the remedy on retiring, only when the patient has suffered during the day, and with those only whose eyes are emmetropic or made so by correcting lenses under the effects of a cycloplegic.

Gelsemium has an excellent effect on ciliary cramp. This drug was brought to my attention by a physician, who referred to me a lady who had been a great sufferer from hemicrania, due to eyestrain, and whom I fitted for glasses. Although the patient was greatly relieved, she still suffered occasionally from headaches, especially after the eyes had been used for a long period at near-work. For this the physician gave her the following prescription, which gave her immediate and permanent relief, although she had taken the same prescription before she was fitted with glasses with only transient effects. It was a favorite prescription with him for headaches:

R.	Morphia sulph.	gr. i	065
	Liquor potassi arsenitis.		
	Tinct. gelsemium (green root), āā.....	ʒi	4
	Elixir simp., q. s. ad.....	ʒiv	120

M. Sig.: One teaspoonful every six hours until headache ceases.

I prescribe his remedy in persistent headaches and eye pains only, and then only in connection with the cycloplegic, as previously indicated, and that after the cycloplegic has failed to give permanent relief.

The physician always insisted on the green root tincture, and not without cause, for I have found that the tincture of this root of the shops is usually worthless. I have prescribed the gelsemium alone, but never with the satisfactory results as in the combination given.

Knowing the therapeutic effects of morphia and arsenic in a general way, we readily comprehend their effects in spasm of muscular tissue; but of gelsemium I would say that it has a specific effect on cyclospasm that is worthy the considerate attention of every oculist.

DISCUSSION.

DR. EDW. JACKSON, Denver—We are too apt to feel that the only question to be settled is whether there exists a spasm of accommodation and its amount. It will be productive of a better knowledge of the subject if we go a little deeper into these cases. There are totally different conditions capable of yielding the same alteration of refraction. There may be, and probably is, a condition of surplus accommodative power in some young hyperopic eyes that is quite removed from spasm of accommodation from overwork. To consider them the same thing is preventive of our clearly understanding these conditions or treating them properly. We can recognize these and also a third form of spasm that is closely dependent on abnormal conditions of the central nervous system.

The next point is the idea widely held that in very high myopia there is no strain on the accommodation. I do not believe this is correct. The high myope, as a matter of fact, often has the thing he is looking at within his far point, and is straining his accommodation. In reading he must sometimes vary his accommodation 2 or 3 diopters to read lines of ordinary length. High myopia with binocular vision almost constantly entails strain of accommodation. The myopia is seldom equal in the two eyes.

As to the treatment, the important thing is the discovery and removal of the cause, which is generally some uncorrected ametropia or some overwork of the eyes. When that has been thoroughly attended to, in patients of good general health, the condition quickly passes away.

I have used cycloplegics in the way mentioned to some extent, but would be very much afraid of using a 1 per cent. solution of homatropin at night if I expected the patient to use the eyes the next day. I have used a 1/5 per cent. solution, and with some satisfaction; also a solution of euphthalmin, which produces a tendency to relaxation. Recovery from the euphthalmin is complete in ten or twelve hours.

DR. JOHN A. DONOVAN, Butte, Mont.—In reference to the treatment of this condition, I have found homatropin to be more or less unreliable. I believe the nearest thing to a total cycloplegic in this trouble is the hydrobromate of hyoscin. My attention was called to it by Dr. Chas. Baker some years ago, and I am convinced that it is considerably the stronger and decidedly more reliable. Towards the end of the week these patients suffer most, and if they use it on Saturday night, by Monday they are able to work again; it takes three or four days to fully pass off.

DR. LAWRENCE R. RYAN, Galesburg, Ill.—In regard to the prescription of Dr. Wright's, containing gelsemium, he made the statement that he was never able to get relaxation of the spasm by the use of gelsemium alone. That would seem to militate against its use. It would seem to me that the morphia itself would relieve the spasm quicker than the gelsemium.

DR. J. W. WRIGHT, Columbus, Ohio—In regard to the use of the solution of homatropin and cocain, when it is used to produce cycloplegia, if instilled four or five times it does not pass off in twenty-four hours, but if only used once, on retiring, it passes off by the next morning.

Knife and Fork Surgery.—The *Hospital* discusses Koenig's method of operating without ever touching the tissues, much as we eat our meals by aid of forks and spoons instead of clawing our food. By practice with suitably-devised metal instruments, Koenig of Berlin has found that he can get through many operations without ever touching the wound. Even in abdominal cases, in many of which it is often impossible to avoid introducing the hand, he carries his instrumental method to its extremest limit. In operating on cases of appendicitis during the quiescent interval he has been able to do the entire operation with instruments. The surgeon often does things with his fingers which, by aid of a little practice, could be done just as well with an instrument, and, if we are to accept as correct all that is said about hand-infection, it would often be well, in suitable cases, to adopt the "knife-and-fork" method.

OCCURRENCE OF THE STRONGYLOIDES INTESTINALIS IN THE UNITED STATES.*

MARSHALL LANGTON PRICE, M.D.
BALTIMORE.

I present for your consideration a somewhat brief and imperfect account of one of the rarer nematodes; rare, at least in this climate and latitude, though occurring with considerable frequency in tropical and sub-tropical countries. I refer to the *Strongyloides intestinalis.* The parasite is endemic in Cochin China, where it occurs in association with the diarrhea peculiar to the country—hence the name bestowed on it by European physicians, "Cochin China diarrhea."

This animal forms one of the class of parasites whose pathologic action is limited to the intestinal canal, and does not extend, as does that of the *Amœba coli,* to the liver and other organs. Teissier has claimed to have observed rhabditiform embryos circulating in the blood, and to have produced metastatic foci in the lungs of infected frogs. These observations, however, have not been confirmed by any other observer, and, for the present, we must conclude that the parasite's pathologic influence is limited to the gastrointestinal tract. The consideration of the diseases caused by animal parasites, particularly those infecting the intestinal canal, is especially opportune at this time, as the different varieties of acute and chronic diarrheas and dysenteries are only now beginning to emerge from the obscurity which has previously enveloped them, and are being placed on a rational basis, where the knowledge of them previously was wholly crude and empirical. This knowledge has already borne valuable fruit; you are familiar with the work recently done under the direction of Professor Welch, of Baltimore, in the investigation of the summer diarrheas of infants, of the discovery of the essential cause, and of the preparation of a serum which promises a specific against a disease causing more than one-half the mortality in urban communities during the summer months.

It is only in the last decade that we have begun to realize that many cases of chronic intestinal flux in this latitude are due to the *Amœba coli,* and one form of parasite which we previously considered wholly indigenous to the tropics, has thus been given a wide sphere of activity in the diseases of temperate climates. We have later been able to recognize the cause of another class of diarrheas through the discovery by Shiga and Flexner of the *Bacillus dysenterica,* and it is probable that many other tropical parasites will be found to be the pathogenic factors of our native diseases. The rôle played by the strongyloides genus in diseases of the United States is hard to ascertain at the present time, but I do not believe it will ever be a prominent one in this climate, yet it will take a place as an etiologic factor in many individual instances in which the nature of the disease was previously unrecognized. The occurrence of the *Strongyloides intestinalis* in the United States was first reported by Thayer[1] from three cases occurring at the Johns Hopkins Hospital, Baltimore, his work remaining the best monograph published on the subject in the United States.

A short résumé of the history of the parasite may here be of interest:

In 1876, Normand, a medical officer of the French navy, while investigating the diarrhea among French troops returning from China, discovered this parasite in the stools. It was studied by Bavey in the same year, and the latter named it *Anguillula stercoralis.* in analogy with the similar terrestial anguillula *Rhabditis terricola,* genus leptodera. The parasite is found constantly in the stools of these patients, and Bavey and Normand considered it the probable cause of Cochin China diarrhea. When these stools were kept warm for four or five days, sexual development took place, some of the parasites assuming the male and some the female type—the original first observed being, indeed, only an embryo. The following is Bavey's description of the sexually mature forms:

> The length of the female is about 1 mm. fully grown, the breadth about 0.04 mm., body cylindrical, slightly diminishing in size anteriorly and tapering to a sharp point posteriorly. When the worm retracted forcibly, slight transverse furrows were to be seen. The mouth possessed three distinct lips and was continuous with the triangular esophagus, which after a stricture dilated again to a second ovoid enlargement. The intestine which followed was fairly visible and ended in a little protrusion on one side of the body near the base of the tail. The intestine was pushed slightly aside by the uterus. A little below the middle of the body on the ventral side opened the vulva leading to the uterus, which extended from the intestinal ventricle to a point near the intestinal opening; here the eggs were massed in varying numbers. In some instances the young had actually broken the shells and were free in the uterus, though more often the eggs on deposition contain well-formed motile embryos.
>
> The male is about 1/5 smaller than the female; the perintestinal cells are more clearly outlined and were accompanied by another long gland, which seemed to consist of small rounded globules. This organ, doubtless the testicle, entered the base of the tail in two small horn-like spicules with tapering extremities curved inward; these spicules contained canals . . . coiled in the same direction . . . and were twice as short.

In the following year a complication occurred in the history of the parasite, with the discovery by Normand of a nematode in the small intestines of a patient dead of Cochin China diarrhea. This was similar to the parasite found in the stool, but larger than even the sexually differentiated forms, and possessing other structural differences. Bavey was able to obtain it from several successive autopsies following death from this cause. He considered it a distinct species, which he called the *Anguillula intestinalis.* It was found only in the female form and was described as follows:

> Length 2.20 mm., average breadth 0.03 mm., the body little tapering anteriorly, terminated rather suddenly posteriorly in a conical tail, the extremity of which appeared rounded and even a trifle dilated . . . . the surface showed a delicate transverse striation; the mouth . . showed three small lips. It opened into an esophagus, practically cylindrical, which occupied about ¼ of the length of the animal, and showed neither swellings nor striations; it was followed by an intestine with which it might readily be confounded without a marked change of color. This extended almost to posterior extremity of the body, but it ceased to be visible in the middle part, which was occupied by a very large elongated ovary. The vulva was situated in the posterior third of the animal and in its neighborhood the uterus contained five or six elongated eggs . . the eggs and viscera were of a yellowish green color and rather opaque and apparently finely granular.

The parasitic form is found at autopsy in the small intestine. They are abundant in the duodenum, less numerous in the jejunum, and absent in the ileum. They seldom reach the stomach under normal conditions, but have been found in the vomitus after an emetic. In

* Read at the Fifty-fourth Annual Session of the American Medical Association, in the Section on Practice of Medicine, and approved for publication by the Executive Committee: Drs. J. M. Anders, Frank A. Jones and W. S. Thayer.

1. Journal of Experimental Medicine, vol. vi, No. 1, Nov. 29, 1901.

stools which have been kept warm for a varying period there is another embryonic form which is frequently seen; this is a much longer, thinner embryo of a more homogeneous constitution, and more actively motile than the more common rhabditiform embryo. This represents the strongyloid form in the embryonic state. The parthenogenetic female shows also the strongyloid type, and indeed, probably develops directly from the strongyloid embryo. The strongyloid embryo, although longer than the rhabditiform, never attains the size of the parthenogenetic mother worm; the average length is from 0.4 to 0.5 mm., the greatest length being 0.7 mm., while the parthenogenetic worm averages 2.20 mm. The following is a comparison of the size of the different varieties:

	Rhabditiform.	Filariform.	Free Sexually.	Partho-genetic, M. W.
Length	0.33 mm.	0.50 mm.	1. mm.	2.20 mm.
Breadth	0.022 mm.	0.02 mm.	0.04 mm.	0.03 mm.

The eggs are oval, and resemble uncinaria eggs, and measure 60 to 70 microns by 34 to 39 microns.

Following Normand's original investigations of the parasite as occurring in Cochin China, other observations were made on the parasite in the tropics. Laveran, Liebermann, Roux and Chartaing each reported cases in 1877 and 1878. Chauvin reported a case originating on the Island of Martinique. Grassi, in 1879, studied the worm, and placed it in a species which he called strongyloides, closely allied to the genus strongylus, of which the most important member pathologically is the uncinaria, or *Strongylus duodenale,* or, as it is called in Europe, *Anchylostoma duodenale,* from which it differs morphologically by certain structural peculiarities, and pathologically by important differences which will be described later. In 1880 the parasite first appeared in Europe with the report by Perroncito of its discovery in the intestinal tract of laborers in St. Gothard tunnel, in whom it occurred in association with the *Anchylostoma duodenale* in certain grave anemias described by Perroncito at that time; since then sporadic cases have been reported from Brazil, Russia, Sicily, Italy, Dutch Indies and Egypt. In 1899 cases were reported along the Rhine and in East Prussia. In 1901 Strong described cases occurring in the Philippine Islands.

In order to understand the divergent opinions that have been held in regard to the unity or heterogenicity of these nematodes it is necessary to describe the forms of parasites that may be found in the alvine discharges of the patients suffering from Cochin China diarrhea during life, or in their intestinal canal after death, all of which are now believed by the preponderance of observers to be morphologic variations of the same parasite. These are, briefly:

1. The rhabditiform embryo *Anguillula stercoralis,* found in the stools on immediate examination.

2. Filariform embryos usually found alone in the stools after one or two days, replacing the rhabditiform embryos.

3. The sexually differentiated form, *Rhabditis stercoralis,* occasionally found in the stools after a varying period—usually about five days.

4. The parthenogenetic mother worm, *Anguillula intestinalis,* found in the intestinal canal of the host at autopsy.

It appears that the worm shows a different development here from that which it exhibits in the tropics. The development of the sexually differentiated living generation must be regarded as the highest exponent of the parasite. This manner of development appears to occur only rarely in temperate zones, and in these regions we must consider that some conditions are less favorable to the parasite's attainment of the highest form, the difference lying either in intrinsic conditions affecting the culture medium, i. e., the stool in which it occurs, or in extrinsic causes affecting the surrounding atmosphere, or in conditions associated with both factors, such as heat, moisture and temperature. It may be premature or inexpedient to theorize as to the exact manner in which these various elements act, still we may presume that the difficulty lies rather in the culture medium than in the surrounding conditions, for while we can largely reproduce the extrinsic conditions, such as moisture, temperature, light, etc., we can not ever exactly reproduce the culture medium, for the latter in the tropics differs greatly from that of the temperate zones, both on account of the different foods which go to form it, and the different bacterial flora which it contains, the latter being much more varied and profuse in the tropics. In support of this view are Leichtenstern's recent observations (1899), that the sexually differentiated generation is cultivated most frequently from cases recently imported from the tropics.

I will later call attention to the disappearance of the parasite from the stools synchronously with that of the numerous bacteria which the latter contains. This condition, while not an invariable rule, is a coincidence of much significance.

The parasite may be arrested at an intermediate stage of its attempt at sexual differentiation, and accordingly, we may find the nematode in our cultures in three distinct states:

(*a*) No attempt at evolution may be made, and the parasite occurs only as the rhabditiform embryo.

(*b*) The parasite may be able to attain the male development, but be unable to attain the female type, a few male parasites occurring in the stool.

(*c*) Complete sexual differentiation may occur, and both male and female types will be found.

Whatever further development may now occur if the parasites are ingested, if still remaining external to the body the filariform embryo is finally produced; in the first case by direct transformation of the rhabditiform embryos, in the last case by the interposition of another generation of sexually differentiated worms.

Keeping these features in mind, how are we to regard the filariform embryo in its relation to the other types of parasites? If we regard the free sexual form as the highest type; as the filariform variety follows after this, it appears that the filariform embryo must be considered an involution form from the highest type. The filariform embryo is, moreover, the last form found in the specimen before the final disappearance of the parasite from the stool. This disappearance must occur, even under the most favorable conditions, in a rather short period. It is probable that the strongyloides embryo is more adapted to the relatively unfavorable conditions found outside the body, and is, moreover, the usual form in which the intestinal canal of the host is infected. If infection occurs in this way it is probable the filariform embryo becomes directly transformed into the parthenogenetic mother worm, which then commences to cast off its ova, and these, in turn, undergo development into the rhabditiform embryos. Leichtenstern has been able to demonstrate this process directly. He administered to human beings filariform larvæ which he had produced by the direct transformation of the rhabditiform variety. After seventeen days rhabditiform embryos were found in the patient's stools. In cultures these became transformed into the filariform

variety, but a number also became sexually differentiated, forming a free living generation, the *Rhabditis stercoralis.*

Leuckart claims that the genesis of the parthenogenetic mother worm is the essential step in the regeneration of the rhabditiform embryo from the filariform. He says, "The structure of the filariform embryo is such that they can not possibly develop again into the rhabditis form. There must be another worm which develops from them, which in the shape of its body and the structure of the esophagus resembles these." The parthenogenetic worm, the so-called *Anguillula intestinalis,* appears to represent this intermediate form which Leuckart considers essential. Hence, while the rhabditiform embryo is transformed directly into the filariform, the filariform can not return to the rhabditiform variety without the aid of the intermediate form. The development of this parthenogenetic worm has never been noted outside of the living host. These conditions probably explain the ultimate disappearance of the parasite from the stools, when the latter are kept for a certain period, the parasites continuing their evolution until the filariform embryo is produced, and beyond this they can not go without the aid of a suitable host. The rhabditiform, as such, does not seem able to survive more than three or four days in the stools.

To trace the life history of the parasite on the assumption of the unity of the various forms, we may conceive of a parasite entering the host as the filariform embryo; within the host becoming transformed into the parthenogenetic female, *Anguillula intestinalis,* the latter giving off numerous ova which, hatching rapidly before leaving the intestines, appear as the rhabditiform embryos (*Anguillula stercoralis*) in the discharges. The next transformation of the rhabditiform embryo depends on the environment. In the tropics the parasite becomes habitually sexually differentiated, forming the species known as the *Rhabditis stercoralis,* from the eggs of which are generated the rhabditiform embryos, which undergo final transformation into the filariform variety. In the temperate zones the rhabditiform embryo passes into the filariform without the interposition of the so-called *Rhabditis stercoralis.* In either event the filariform embryo is the final stage completing the cycle.

The first case in this country described of infection with the *Strongyloides intestinalis,* was that of a German tailor, aged 56, who entered the Johns Hopkins Hospital, Baltimore, Dec. 7, 1896. The case was complicated with intestinal infection with the *Trichomonas intestinalis* and amebic dysentery, which latter disease proved fatal on the development of an abscess of the liver. The parasite was discovered by Strong in the stools, and was reported, together with two like cases, by Thayer in 1901. Thayer's account of the case is summarized below:

CASE 1.—*History.*—K., a German tailor aged 52, was admitted to the Johns Hopkins Hospital Dec. 7, 1896, complaining of pain and swelling in the right side of the abdomen and over the lower ribs.

The family history was negative. He had had measles in childhood, but had otherwise been a healthy man. He denied venereal disease. Up to six years before he had lived in Austria.

Three years before entry he began to suffer from diarrhea, which has continued since that time. There were daily from two to five operations, which occasionally contained a little blood; these were never associated with pain. Three weeks before entry he began to notice a painful swelling on the right side over the lower ribs. He had had no chills, and as far as he knew no fever. For two weeks before entry there had been a slight cough without expectoration.

Physical Examination.—The patient appeared emaciated and feeble. The heart and lungs were negative. The abdomen was somewhat distended; there was slight movable dulness in the flanks. On the right side over the cartilages of the tenth and eleventh ribs there was a large fluctuating swelling, 7½ cm. in diameter; no tenderness or redness. Between this and the spinal column there was another swelling, about 15 cm. in diameter, extending from the median line to the spinous processes, and from the twelfth rib over the crest of the ilium downward for a distance of 7 cm. The skin over this was adherent, red and thin. The hepatic flatness was not increased.

Operation.—Immediately after entrance this abscess was incised and evacuated. The cavity contained a large amount of puriform material with dark shreds and considerable grayish debris. The cavities extended into the liver. About one and a half pints of fluid were evacuated; this contained many large, actively motile amebæ, showing the ordinary characteristics of the *Amœba coli.*

The patient had daily from two to four fluid, brownish, foul-smelling stools, which contained besides *Amœba coli,* considerable numbers of the *Trichomonas intestinalis,* as well as numerous small nematodes, identified by Mr. Strong as the rhabditiform embryos of the *Strongyloides intestinalis.* The wound and the colon were irrigated with a solution of quinin, 1/1000. The patient gradually failed, and died on December 26.

Autopsy.—The protocol of the autopsy reads: Amebic dysentry; ulceration of the large intestine; retroperitoneal abscess; operation wounds; parenchymatous and fatty degeneration of the kidneys; fatty liver; fatty heart; intestinal infection with *Trichomonas intestinalis* and *Strongyloides intestinalis.*

The large intestine showed the extensive ulcerations due to the amebic infection; the small intestine was free from ulceration, but showed slight occasional ecchymotic patches.

Along the whole of the small intestine Dr. Stiles and Mr. Strong found embryos of the *Strongyloides intestinalis;* and parthenogenetic mother worms were found in the duodenum and jejunum.

Dr. Strong was successful in this case in the cultivation of a single sexually differentiated parasite. This was of the male type, and was dead when discovered. No female forms were found.

The second case did not occur until nearly three years later. The symptoms of this case were chronic diarrhea and emaciation, and were not especially marked, and might easily have escaped the more superficial examinations, as it was only observed as a dispensary case. The case did not escape the vigilance of Dr. Thayer, in whose hands it fell, and the diagnosis was made almost as soon as observed.

CASE 2.—*History.*—A newsboy from Richmond, Va., where he had lived all his life. The family and previous history showed nothing bearing on the case. He had had the usual diseases of childhood, and five years ago had tertian ague.

Three years before entry the patient began to suffer from diarrhea, the attack coming on during the summer. The operations were very thin and yellowish in color, containing at times a small amount of blood, though this had not been noticed for a year and a half. The passages occurred mainly at night, as many as seven or eight in 24 hours, but of late only about four. There was at first considerable mucus in the stools, but this had been practically absent during the two years before entry. The diarrhea had never been associated with any pain. The patient had been, however, growing gradually weaker, and during the second year of his illness he had been compelled on one occasion to take to bed for two weeks. Four months before entry he gave up work on account of weakness, though up to that time he had felt tolerably well. The appetite was good. There were no dyspeptic symptoms.

Physical Examination.—A slight emaciated boy of sallow color. The lips and mucous membranes were somewhat pale; tongue clean. Examination of the heart and lungs was nega-

tive. The abdomen was not distended. The spleen was not palpable. No enlargement of the liver.

The patient entered the hospital July 7 and was put to bed and given a liquid diet. The only medication given at first was bismuth. Later the patient was, on two occasions, given thymol gm. 2 (gr. xxx), the dose being repeated after an interval of one hour, and following this an active purge. Male fern was given in like manner in doses of one dram.

The patient's symptoms improved greatly and he gained twenty pounds in weight. He was discharged at his own request August 26. The stools on discharge still contained moderate numbers of the rhabditiform embryos of the parasite.

CASE 3.—*History.*—A native of Maryland, who had never been out of the state except on an occasional visit to Washington. J. S., a farmer, was admitted to the Johns Hopkins Hospital July 19, 1900, complaining of diarrhea and swelling of the feet. The patient had been a farmer all his life; his habits have been good; he has had no serious illnesses except chills and fever fifteen years before entry. He had considered himself a healthy man up to six months ago, when he began to suffer from diarrhea and progressive weakness. The stools, very frequent and sometimes involuntary, were fluid, but never contained blood. They were small in quantity. During the two months before entry the patient had on several occasions vomited a yellowish fluid. For two days he had had sharp, griping pains in the lower abdomen. For a month there has been edema of the feet and legs. . . . During the last two months he has lost considerably in weight and much in strength.

Physical Examination.—Moderate atheroma of the radial, slight abdominal distension and flatness in the flanks. On examination a moderate number of characteristic rhabditiform embryos of the *Strongyloides intestinalis* were found, together with a few red blood corpuscles and large numbers of leucocytes. The temperature was slightly elevated, 100.6 F., on entry, but with the exception of an occasional rise to a point between 99 and 100 it remained subnormal during the greater part of the patient's sojourn in the hospital.

On entry the patient was given a milk diet and powders of tannogen and bismuth subnitrate, q. 4 hours . . . . on April 12 . . . he was given thymol, gr. v. q. 4 hours . . . . on August 13 the thymol was discontinued and four doses of santonin were given at hourly intervals. . . . the patient was considerably better. There was a gain of 21½ pounds in weight between July 29 and September 17, the date of his discharge.

The blood examination from all three of these cases showed moderate anemia, the hemoglobin in the first case of Thayer's series registered 48 per cent., and in Case 3 of this series 57 per cent.; in both of these cases, however, there were complications present; the first case was complicated by amebic dysentery, the last case with a probable renal sclerosis. The high leucocyte count observed in the first case is easily accounted for by the amebic infection. The presence of a hyperleucocytosis in Case 3 is hard to account for; the one count made showed 21,500 leucocytes to the cubic mm.; unfortunately, no further count was made. None of the three cases showed any eosinophilia. The differential count in the first case gave:

Polymorphonuclear leucocytes	88.3 per cent.
Small mononuclear leucocytes	7.5 per cent.
Large mononuclear leucocytes	2.4 per cent.
Transitional forms	1 per cent.
Eosinophiles	.3 per cent.

The blood count showed 3,412,000 r.b.c., leucocytes 32,100; hemoglobin 48 per cent. Twelve days later the eosinophiles had fallen to 0.1 per cent., and the leucocytes to 30,000. The *valeur globulaire* was little affected, the blood generally showing the changes similar to all secondary anemias resulting from loss of blood.

Thayer's second case is of much interest on account of the occurrence of a number of eggs in the stools. This is very rarely observed in infection with the *Strongyloides intestinalis* unless there also be present an uncinarial infection.

After the report of Thayer's cases no further cases were observed until the middle of 1902, when two cases were discovered within a few months of each other; one occurring in the practice of Dr. Moore at Galveston, Texas, the other case occurring at the University Hospital in Baltimore in my own service. This case I wish to describe in some detail:

CASE 4.—*History.*—Entered the University Hospital July 25, 1902, complaining mainly of a chronic diarrhea, which had lasted about five months. The movements varied from about 2 to 15 daily; average was about 10 to 12. Operations were painless and were not accompanied by tenesmus. Alvine discharges were watery and contained mucus. There were occasional slight griping pains in the abdominal region. Patient had lost about 15 pounds in the last three months. Occasional sweating was present, both at night and during the day and accompanying this mild rigors. There had been slight cough lasting about two years, and occasionally sharp pains have been felt in the chest. The patient was operated on about two years ago for fistula in ano. He lost two sisters from pulmonary tuberculosis, and his father died of the same disease at the age of 20.

Physical Examination.—Patient is a well developed man, rather thick set, of excellent physique with a clear, ruddy complexion, but with some slight pallor of the mucous membranes. Height 5 ft. 6 in. Weight about 135 lbs. His previous regular weight has been about 145 lbs.

Eyes.—Clear and bright, pupils react readily to light and accommodation. Palpebral mucous membrane a trifle pale. Lips showed some pallor and a faint cyanosis. Tongue was pink, moist and clean . . . . moderate enlargement of tonsils . . . no other glandular enlargement. . . .

Chest.—The thorax is large and well formed, costal angle about 45 degrees, expansion fair, equal on both sides. Both supra- and infraclavicular fossæ are well filled. Apices of the lungs rise about ¼ inch above the clavicles. There is good resonance over both clavicles and over the anterior thorax. Expiration a trifle prolonged . . . a few sonorous râles were heard . . . at the right apex posteriorly the respiratory murmur was roughened and the sonorous râles more numerous and an occasional clicking sound was heard. The voice sounds are considerably exaggerated. On percussion there is slight diminution of resonance and a slightly elevated pitch.

Heart.—Situation of the apex beat is normal, cardiac sound is clear, both at the apex and base.

Abdomen.—Hepatic flatness begins at the sixth rib and extends about ⅛ inch below the costal margin. The liver and spleen are not palpable. Abdomen is soft, no tenderness or tympanites. Lymphatics somewhat enlarged. . . . .

There were several possible conditions to be considered as the essential cause of this diarrhea. The tubercular history with the history of fistula, the occurrence of slight rigors and sweating with cough lasting two years, rather indicated a tuberculous process with ulceration of the bowel. The excellent physical condition of the patient, absence of emaciation and of glandular or peritoneal involvement were at once sufficient, however, to negative this assumption. It is seldom that extensive tubercular ulceration lasts more than a few months without some local or general peritoneal involvement. The long periods of remission are also antagonistic to this assumption. The absence of pain, the long remissions and liver enlargement, together with slight rigors, suggested an amebic infection. On examination of the first specimen of stool, however, a single parasite was observed. This parasite was very sluggish and its movements only lasted about half an hour, and owing to this fact, and to the examination being made at night, it was not possible to determine accurately its characteristics, but it appeared to be an uncinaria.

Examination of the Stools July 29.—Stool of semi-solid consistency, brown in color, odor not especially marked.

Microscopic Examination.—Red blood and pus cells abundant—fine granular detritis—few starch granules (in addition to the parasite already described).

Treatment.—The next day the case was seen in consultation with Drs. Thayer and Atkinson, and on passage of the rectal tube Dr. Thayer was able to find a number of the rhabditiform embryos of the *Strongyloides intestinalis*. The patient was put on liquid diet for twenty-four hours, and then on soft diet, and was confined to bed. The only medication given was small doses of quinin. Under rest and diet the symptoms abated greatly. The number of daily movements averaged about the same, but the involuntary evacuations of the bowels at night ceased.

Examination of the Stools August 2.—Granular detritis, pus and blood cells diminished; numerous motile and non-motile bacteria.

The stools were now examined daily. The occurrence of the parasites was very variable; occasionally the fecal drop would contain five or six specimens and at other times none would be found after a careful search through a number of specimens lasting two hours. The greatest number found in any drop of fecal matter did not exceed ten or fifteen. There appeared to be a constant relation between the number of parasites and the number of bacteria occurring in the stool. When there were no bacteria evident, on microscopic examination, the search for parasites proved futile; on the other hand, stools containing large numbers of bacteria usually contained numerous parasites. Nearly all the softer stools contained both bacteria and parasites. The stools, both microscopically and macroscopically, showed the presence of an intestinal indigestion. They contained during all of the diarrheal relapses undigested food, and the odor was usually offensive. In one instance fermentation had occurred, and bubbles of sulphuretted hydrogen were being given off rapidly. This specimen contained numbers of parasites.

A certain technic is necessary in the examination of the stools, and in the cultivation of the other forms of the nematode, especially if the endeavor is to be made to cultivate the sexually differentiated forms.

The stools as soon as passed should be placed in open vessels and kept at room temperature. It is best to divide the stool into three portions so as to observe the parasite under varying conditions. One specimen may be placed on the top of the sterilizer, one beneath and one at room temperature. A little normal saline solution may be added to the stools of the more consistent kind, the embryos having a tendency to collect in this portion. For examination, a considerable dilution of the drop is always necessary, otherwise the embryo, being almost transparent, will escape observation. It is best to commence the examination with the ¾-inch objective, and reduce the light somewhat.

Examination of the Blood August 10.—An examination of the blood was made August 10 with the following result:

Hemoglobin	82 per cent.
R. B. C.	4,672,000
Leucocytes	7,800
V. G.	0.88

A marked eosinophilia is present.

This moderate anemia gradually improved with the improvement in the general condition. The leucocyte count was practically normal, and never at any time showed a marked increase.

An eosinophilia was present sufficiently marked to be plainly evident on the examination of the fresh blood. Eosinophilia is not a symptom generally observed in intestinal infection with the *Strongyloides intestinalis*, and its presence in this case suggested strongly a condition of mixed infection frequently observed, viz., where the strongyloides and uncinaria are cohabiters of the intestinal canal. This condition strengthens the possibility that the first specimen observed was really an uncinaria. The eosinophilia in these cases frequently persists after the anemia and other symptoms have disappeared and the parasite has apparently been completely eradicated. A differential count was made some days later by Dr. Rankin, resident pathologist to the University Hospital, and he examined several stained blood smears at the same time:

QUANTITATIVE:		
R. B. C.		4,736,000
Leucocytes		7,860
DIFFERENTIAL COUNT, LEUCOCYTES:		
Polymorphonuclear	250	47.5 per cent.
Small mononuclear	157	29.6 per cent.
Large mononuclear	50	9.5 per cent.
Transitional	8	1.1 per cent.
Eosinophiles	61	11 per cent.
Cells counted	525	

Qualitative.—Red blood corpuscles show little change. No poikilocytosis and corpuscles uniform in size. Slight pallor. White blood corpuscles, polymorphonuclear leucocytes, show every variety of degeneration. (*a*) There is increase in eosin staining. (*b*) There is loss of neutrophilic granules. (*c*) There is vacuolization, fragmentation and loss of outline in the body of the cell. (*d*) Nucleus is enlarged, paler and shows clear vacuoles—hydropic degeneration. (*e*) Perinuclear basophilia marked. The nuclei also show supernumerary lobes in many cells. Small mononuclears vary considerably in size, are more granular and the nucleus often irregular. Large mononuclears much increased, show marked degenerative changes, principally in an increase in granules and considerable hydropic degeneration. The nuclei of many of these cells are much fragmented and many look as if they were undergoing karyokinesis. Eosinophiles vary considerably in size and in number of granules contained; but all the granules are uniform in size and of equal staining power. No iodophilia.

On August 21, commencing at 11 a. m., the patient was given thymol, grs. vii, every five minutes until twelve doses were given, the patient receiving in the hour gm. 12 (180 grains).

The patient had some abdominal pain and griping, not enough to give him any serious inconvenience, and experienced some slight nausea. He was freely purged, and eight specimens of the stools were obtained, containing an abundance of undigested food. Any further purgation was considered unnecessary. The patient was given no food for twenty-four hours previously. The specimens of stool contained numbers of embryos, all of which were dead. No specimens of the parthenogenetic worm were observed.

One week later the same treatment was repeated, thymol being again given in heavy doses and following this a purge. In the evening an enema of sol. of quinin was given (1 to 1000).

After this treatment the patient improved considerably and was able to resume house diet. Examination of the stools, however, showed actively motile rhabditiform embryos, though in diminished numbers. The patient was now much better, and during my absence from the hospital he was discharged.

He disappeared from view until the beginning of April of this year. He had gone over to Washington, where he sometimes lived, and experienced a severe relapse. He gave his history in one of the Washington hospitals, and learning that he had been treated for a "foreign worm" a specimen of the stool was sent to Dr. Stiles, who found numbers of embryos in it. Since then Dr. Stiles has made systematic examinations of the stools in about 150 cases, and has succeeded in adding to our knowledge of the occurrence of the parasite in this country, five additional cases.

(*The conclusion of this article will appear next week with the two articles on the same general subject by Drs. Henry B. Ward and Claude A. Smith.*)

To administer quinin to children, according to a French pharmacist, mix 1 gm. (15 gr.) of the sulphate in a mortar with 8 gm. (2 drams) of olive oil. Twenty drops of this mixture will contain 5 centigrams (¾ gr.) of quinin. The mixure is poured into a tablespoonful of sugared milk, and will be easily swallowed.—*Indian Med. Record.*

SHOULD THE TUBERCULOUS PATIENT KNOW THE TRUTH REGARDING HIS CONDITION?*

C. P. AMBLER, M.D.
ASHEVILLE, N. C.

All physicians who practice at health resorts frequented by patients suffering from pulmonary tuberculosis find that comparatively few of these patients have any conception of their real condition, and in the rarest instances have they been carefully instructed as to the necessities for recovery.

The profession generally seems to be of the opinion that tuberculous patients should not be told the nature of their trouble, but the average tuberculous patient generally finds out the true nature of his disease, and when he does he loses faith in his physicians, and frequently, very justly, will censure them for not telling him the truth.

How is it possible to get the coöperation of the patient; to have him use care in the disposal of expectoration; to avoid violence and over-exertion in exercise, and many other things so important in the detail management of the case, if he does not even know that he has a serious trouble with which to deal?

The truth may depress him; probably it will for a short time, but it will not do him near the harm that his ignorance will result in, if he does not appreciate his condition. Every state and municipality is awaking to the danger of infection from the dried sputum of tuberculous patients. Our journals are full of papers advocating antispitting ordinances, institutions for the tuberculous poor and other safeguards intended to protect the public. But why, pray, should we have ordinances and legislation unless the patient is always to know the truth? Legislation we need, but we first need more candor on the part of the physicians.

Formerly a diagnosis was only made in the advanced cases. The patients all promptly died. Result: the laity watched these cases and observed, "they all die." But little idea was ever entertained in those days of the danger to others. We, as physicians, by our tardy diagnosis, have educated the public to the belief that the disease is uniformly fatal.

It is the duty of the physician to explain to the patient the dangers to himself and to others; to point out where he is most apt to make mistakes; to give explicit directions regarding his hygienic life, including diet, exercise, work, physical or mental application, secretion and excretion, sexual relation, and in fact, to go fully into the whole question of the hygienic life. Such instruction on the part of the physician is much more important than the prescribing of drugs with an idea of "cure" in this disease. These instructions and directions should apply to the incipient as well as the advanced cases. To get the coöperation of an incipient case (and his coöperation is of the most vital importance) he must know the truth.

The patient should thoroughly understand the possibilities of communicating the disease to others, and also that he can infect sound tissues in his own lung if he is not careful in following directions for disposal of expectoration. How can we expect care on his part if he does not understand the danger, both to himself and his friends? Many will use care on account of their friends, and others more selfish can only be appealed to with good effect when they realize that they endanger themselves.

The laws of health demand that the patient fully realize the danger to self and others.

Appeal to the patient on the ground that it is unkind to his friends not to make every effort to protect them. If this plan had been followed more in the past the disease would not be so common to-day.

If tuberculosis produced the rapid disfigurement and distress that many of our acute diseases do, or was the active developing disease that smallpox is, we would have quarantined against it long ago. Its slow development makes it hard for the laity to realize that danger exists. Quarantine is unnecessary in tuberculosis, provided the patient is properly instructed and these instructions carried out. The whole country is awaking to the fact that something must be done. We, as physicians, should realize that one-sixth of our death rate each year is caused by tuberculosis; in other words, one-sixth of those who die this coming year in this country will die of this disease. Those who die from tuberculosis the two years following this, in the great majority, already have the disease in an incipient form. It is to their interest to know the truth to-day. It is to the interest of the general public that they know it; that they are fully instructed and cautioned. They consult us for this purpose; it becomes our duty to determine their condition early and so inform them. We have a duty to the other members of a family as well as the patient. Can the state house this great army of patients? Can we quarantine them if we would? No. How can we, as physicians, prohibit the infection of others? By educating the people to their danger and instructing the patient as to his duty.

Is there any way in which the necessary hygienic measures can be secured without the coöperation of the patient? Can we ever get his coöperation unless we tell him that he has a tuberculous disease?

The patient comes to us for the truth. It is our duty to show him that the disease is not the fatal disease that the public have imagined, if instructions be followed. Every physician should keep at hand printed matter, instructions or directions, to put into the hands of the tuberculous patients.

We have for years told our patients that this disease is like unto a fire in a house. If you get after the fire when the match is struck it is easy to put out; let it burn until one whole room is on fire and you have a much more difficult undertaking; let it burn until the house is on fire from garret to cellar and it is sure to burn up.

For the protection of our neighbors, as well as our own property, we all handle fire with care. If a friend's house is on fire would you tell him? A thousand times more important is it to tell him when we find that he is infected with tuberculosis; here the greatest possession he has on earth is at stake. The sooner he knows it the better.

By telling the patient the truth, we may occasionally shorten the days of a few, but in the long run will save the lives of many hundred by following this policy. Our surgeons operate to save life, even when grave danger exists by such an operation to the patient. If our tuberculous patients are not told the truth, the danger is not only to the patient, but to all his friends included.

It is an unpleasant duty to perform, but one from which no physician should shrink; and especially should patients never be sent away from home without knowing their true condition.

* Read at the Fifty-fourth Annual Session of the American Medical Association, in the Section on Practice of Medicine, and approved for publication by the Executive Committee: Drs. J. M. Anders, Frank A. Jones and W. S. Thayer.

How frequently are we consulted by some poor soul who had left home and arrived at the resort suffering, as he says, from a "slight throat trouble"; arrived may be in the beginning, and, perhaps, well advanced in pulmonary or laryngeal tuberculosis; without money, expecting to procure work to pay for his board and keep; arriving under the fond delusion that by climatic influence his trouble will soon disappear; with no conception of the necessities for recovery; no knowledge of the gravity of his disease; in many instances his chances were a thousandfold better at home among his friends, had he been told the truth, given explicit instructions, given less medicine and more time by his physician.

The tuberculosis patient who does not know his true condition rarely improves. As his case progresses he becomes discouraged and loses confidence in his medical advisers, thinking they do not understand his case. Can he be blamed?

On the other hand, the patient who is told the truth may temporarily be depressed, but he quickly responds and enters heart and soul into the fight before him. Rarely indeed do we find a patient who has been properly instructed and handled (without misrepresentation) who does not look forward to recovery. Phthisical patients are, as a rule, hopeful. Not so the patient who does not know what is the matter.

Intelligent pulmonary patients sent away from home without being told the truth frequently, from observation alone, find out their condition. When they make this discovery themselves it creates distrust of the physician at home and places the physician at the resort in an embarrassing position, where the truth from him now will reflect on the physician who may have referred the patient to him; or, he likewise must misrepresent the facts to the patient with the result that later he will be censured, with the home physician, for "not finding out what the trouble was."

True, there are exceptional cases where the patient is accompanied by the parent or some one who can control him, when the whole truth need not be given to the patient, but these cases are extremely rare. We have in the past relied too much upon drugs; we have been too free with our prescriptions and too careless in our instructions. If we would give the patients more of our time and less of our dope it would be better for the patient. The good results obtained from institution treatment of this disease are dependent, in a great measure, on the fact that the patients know their condition and are under constant supervision and instruction.

For the good of our tuberculous patients; for the protection of their friends and the public generally; for the protection of ourselves, both physically and from censure, let us fully inform our tuberculous patients as to their disease, and when so informed take the time to properly instruct them what to do and what to avoid.

To secure **the proper position of the profession** requires its unification, and unification can only be brought about by efficient organization, which, in turn, must be preceded by the enrolling of those who are to be organized. It ought to be made very clear that the man who, being legally admitted to practice medicine, does not unite with the local society places himself in the same relation to the medical profession that a bushwhacker does to an army. That man who manifests no interest in his profession will, in the last analysis, be very apt to forget the proprieties to be exercised toward the individual physician with whom he may come in contact.—Editorial, *Lehigh Valley Medical Magazine*, June, 1895.

THE INFLUENCE OF CONSANGUINITY ON THE ORGANS OF SPECIAL SENSE.*

LEE WALLACE DEAN, M.S., M.D.
IOWA CITY.

In treating this subject I have found that I am compelled to confine myself almost entirely to the eye. It presents to us such possibilities for exact investigation that the results secured overshadow those gained from a study of the other organs of special sense.

We have here blood vessels and a nerve with its end organ exposed to view. We can look on mesoblastic and epiblastic tissue. We can observe embryonic conditions if they exist. With the exception of the nervous system, more degenerate conditions are found in the eye than in any other part of the body. As most of the deleterious results of consanguinity are degenerative conditions, we ought to expect this to be a good field for research. You will readily observe that this paper is not a complete treatise on this subject. It has been almost impossible to find literature relating to it. I can only give to you the results of three years of observation of cases and study of them.

It is entirely unnecessary to go into the question as to the influence of consanguinity on organism as a whole. Talbot very nicely answers this question when he says that if the parent stock is perfectly pure there can be no bad results from consanguineous marriage. But if the parent stock is not pure there may be serious consequences. It is so rare to-day to find a perfect parent stock. An apparently perfect stock may not be so because hereditary influences may be quiescent for generation after generation, as is shown by atavism. In order to bring before you the practical side of this subject and its economic importance, I wish to cite some cases. All cases where the name of the observer is not mentioned are cases that have come under my own observation unsolicited in the short space of three years. Some of these cases were reported to the American Academy of Opthalmology and Rhinolaryngology:

CASE 1.—Male, age 17. Parents, grandparents, uncles and aunts had no serious eye trouble or degenerate stigmata. Parents were bright, well-to-do people. He has three sisters, Bessie, age 15, who is partially blind; Effie, age 9, whose vision is good, and Grace, age 4, who is blind. He has three cousins, one boy and two girls, all in the same family. Of these, Louis, age 16, is almost blind; Oran, age 19, can not count fingers, and the girl, age 13, seems to have unimpaired vision. The trouble in each case was retinitis pigmentosa. The fathers of the two families were brothers and the mothers sisters, and the fathers were cousins of the mothers. As the result of these two marriages we have in one family four children, three of whom are partially blind, and in the other family three, two of whom are practically blind.

CASE 2.—Female, age 14. Father and mother have brown hair. Parents were related. There is no history of malformation or other degenerate stigmata in the family. The girl is very large, but weak; she is not intelligent. Her hair is white; iris is a light blue. Examination of eyes revealed nystagmus, V.=6/24. Fundi without pigment. Diagnosis, albinoism.

CASE 3.—Female, age 16. Parents second cousins. Patient's teeth were imperfect. She had but three upper incisors, one root germ not having developed. An examination of eyes revealed V.=fingers in 2 M. Her eyes are so small that she has to hold her lids open with her fingers in order to see. On the right side there is a congenital absence of the iris. In the left eye the cornea is elliptical, being 3 mm. wide in a

* Read at the Fifty-fourth Annual Session of the American Medical Association, in the Section on Pathology and Physiology, and approved for publication by the Executive Committee: Drs. L. Hektoen, F. B. Wynn and W. S. Hall.

horizontal direction and 2 mm. in a vertical direction. On this side there is a large coloboma of the iris, one-half of the lower portion being absent.

CASE 4.—Male, age 17. Parents are perfectly healthy. None of his ancestors have shown any signs of degeneracy so far as could be learned. His father and mother were first cousins. He has one brother and two sisters. One of his sisters is an idiot. She has microphthalmos, misplaced ears and other signs of facial degeneracy. The patient is exceedingly simple-minded. His ears are large and placed at right angles to the head. The helix is deformed. His face is covered with a growth of silky hair. The lower jaw is exceedingly small and is retrusive. He has no adenoids, but always keeps his mouth open. Examination of the eyes reveals on the right side a microphthalmic eye with a coloboma of the iris and choroid. On the left side there was an apparent absence of the eye. There were two small lids and a socket. No eye could be felt by introducing the finger in between the lids and feeling about in the orbit. The lower part of the socket was deformed. The union between the malar and the superior maxillary bone had never taken place. There was a space one-fourth of an inch wide between the two bones. The patient was given an anesthetic and a dissection of the contents of the orbit was made. The fissure between the malar and the superior maxillary bone was found to extend back to the spheno-maxillary fissure. In the apex of the orbit, lying closely against the optic foramen, was found a rudimentary eye. It was removed. It was about one-third of an inch in diameter. With the naked eye no change indicating the cornea could be detected. The eye was hardened in formaldehyd and alcohol and stained with hematoxylin and eosin. The eye was composed of an outer thick fibrous coat. The cornea could only be differentiated microscopically from the sclera by the absence of an inner lining of pigmented cells. The eye was filled with a myxomatous tissue much more solid than the normal vitreous. It contained some blood vessels, one of which was very large. No trace of retinal elements could be found. The internal structures seemed to have all undergone a myxomatous and mucoid degeneration. The lens and retina seemed to be absent.

CASE 5.—This is not a single case, but the report of a family with six children. The father and the mother were both dark complexioned. There was no history of any degenerate condition in the family. They were first cousins. They had but six children. Of these, two were dark complexioned and had good vision. The other four were albinos and had a vision of 6/12 or less.

CASE 6.—Female, age 5. Parents were first cousins. No history of any serious eye trouble or of degenerate conditions in family. Child was very dull. Left eye began to enlarge shortly after birth. O. D. apparently normal. O. S. very much enlarged. Tension normal. Diagnosis, congenital glaucoma left. The left eye was enucleated. The usual cupping of the disc was present. Microscopic examination failed to reveal any obstruction of the canal of Schlemm.

CASE 7.—Female, age 6 months.. This case I saw in consultation with Dr. Cooling of Wilton Junction, Iowa. Parents were healthy. No history of any tumor or eye trouble in the family could be elicited. Parents were first cousins. The parents said that two months before the right eye began to increase in size and a few weeks later the left began. The child apparently could not see. Pupils were dilated; would not react to light. Tension in right eye +2, and in the left +1. Both eyes were enlarged, the right the more. Lying behind the iris in each eye could be seen a large tumor. Diagnosis, double-sided neuroepithelioma. Four months after the child was seen it died.

CASE 8.—Male, age 4. Parents' and grandparents' history negative. Parents cousins. Boy has congenital coloboma of iris in each eye and anterior polar cataract in the right eye.

CASE 9.—This is a family reported by Dr. Vail. Parents cousins. Consanguinity was positively denied for a year. Parents' and grandparents' history negative. As the result of the union seven children were born. Five had congenital cataract. The cases were so helpless that Dr. Vail recommended that no more children be born.

CASE 10.—Dr. Alt reports a family in which there is constant intermarriage. Senile cataract is hereditary in the family. In the last generation several cases of congenital cataract have made their appearance. If there is any relation between the senile cataracts and the congenital the former must be hereditary cataracts not the result of a sclerosis of the nucleus of the lens, but rather a nutritive disturbance. One could not think of the former condition appearing in children.

CASE 11.—Female, age 12. Parents' history negative except that they were first cousins. Is an only child. Has simple atrophy of the optic nerve.

Of 181 blind children in the Iowa College for the Blind in 1900, 9, or about 5 per cent., were the result of consanguineous marriage of the first degree. The number of consanguineous marriages of the first degree in Iowa is far below 0.5 per cent. I ought to say that it is exceedingly difficult to secure a history of consanguineous marriage when present. There were probably others present in the college the result of consanguineous union.

If we exclude from the list those blind children who were blind because of blennorrhea neonatorum, sympathetic ophthalmia, trachoma, etc., and consider only those who suffered because of congenital conditions, we would find that 14 per cent. were the result of consanguineous marriage of the first degree. These figures seem large. I do not think they ought to be considered as indicating the relative proportion of degenerate eyes in families the result of consanguineous marriage and in those not, because we are considering here only one field. Among the pupils who have entered the college since 1900 the per cent. is about the same.

Two factors may enter into the production of many of these conditions: 1. The eye is really an outgrowth from the brain, and is consequently subjected to the same conditions as the central nervous system during its development. 2. The eye is changing, and an organ that is adapting itself to new conditions is more liable to malformation than one with a constant condition. The socket is becoming less deep and the superciliary ridges less marked. Fuchs believes that in families with school myopia the eyes have adapted themselves to their work.

A number of interesting things are suggested by these cases: 1. The relation of the inheritability of a condition to its production by consanguineous marriages. I would judge from these cases that the greater the inheritability of a condition the more liable is it to be the result of consanguineous marriages. Theoretically, this would also be the case. Retinitis pigmentosa is a disease of great inheritability. I have now under observation a grandfather, a mother and a son each with retinitis pigmentosa. As it is a comparatively rare condition there is not the chance for doubting the tendency of its appearing by marriage of individuals not related as the more common conditions.

The influence of consanguinity on retinitis pigmentosa has been mentioned by several. Dr Liebreich says that of 26 cases of retinitis pigmentosa, 53.8 per cent. were the result of consanguineous marriage. Magnus reports 33 per cent. of cases of retinitis pigmentosa in children, the result of consanguinity. Of 66 cases reported by Chapault, 45 per cent. were the result of consanguineous marriage. Of 18 cases under my observation where the history of the parents could be secured, 8, or 44 per cent., were the result of

consanguinity. Schobel[1] says it is generally dependent on consanguinity. A very careful examination into the history of the ancestors of the cases I mentioned failed to reveal any eye trouble of importance. Yet in the first group mentioned we have these cases appearing by intermarriage in the two groups when consanguinity took place. Albinoism has a strong inheritability. Congenital cataracts have also strong inheritability. Most of the cases mentioned were not true cataracts, but capsular opacities, the result of non-absorption of fetal structures. In approximately one-third of the cases, however, the capsule was not opaque, but the lamellæ were affected.

Some light may be shown on the cases reported by Dr. Alt, where congenital cataracts appeared in the offspring of relations suffering from senile cataract by the fact that hereditary cataracts some time appear earlier in each succeeding generation. I know of a case where the grandfather developed cataracts at about 50; the mother had one at 35, and the son had congenital cataracts.

2. It is interesting to note that where there is an arrest in development, as in the cases of microphthalmos, coloboma of the iris, congenital cataract, and anophthalmos, the eyes are in an opposite state to those of eyeless fishes and worms where they have been lost by disuse. Wagenmann[2] has found that the lens and the retina were almost the least of the structures acted on, and that the phyletic degeneration does not follow the reverse order of development. The eye does not resemble part embryonic conditions as in the eyes where there is an arrest of development. At birth the eye is almost normal, but with age it degenerates. The microphthalmic eye improves the first ten years after birth, owing to a diminution of the hyperopia. A third point in connection with these cases is the resistance after operative procedures. Dr. Gruber of London writes me that he has operated on a number of such eyes with good results. I have never seen any serious sequelæ following an operation. While there is an arrest of development, the nutrition is apparently normal.

As to the influence of consanguinity on the neuro-epithelioma, I would certainly not express any opinion. I simply mention the case as I found it while conducting my investigations.

DISCUSSION.

DR. J. W. FOSS, Phoenix, Ariz.—This subject of inbreeding is given a great deal of attention by stockmen, but is neglected by human beings. About two months ago I visited an ostrich farm near Phoenix, and they had just hatched out eight or ten chicks, and out of the lot, because of physical deformities, there was only one it was possible to save. This was the result of interbreeding. It costs so much to get a male ostrich from Africa that to save expense they interbreed and get few perfect offspring as a result. This paper gives us the key to our duty as physicians, and we can prevent many of these consanguineous marriages by firmly and persistently impressing on our patients and friends the unfortunate results of such union.

1. System of Diseases of the Eye. Norris and Oliver, vol. iii, p. 460.

2. Archiv für Entwickelungs Mechanik der Organismen, 8, 4.

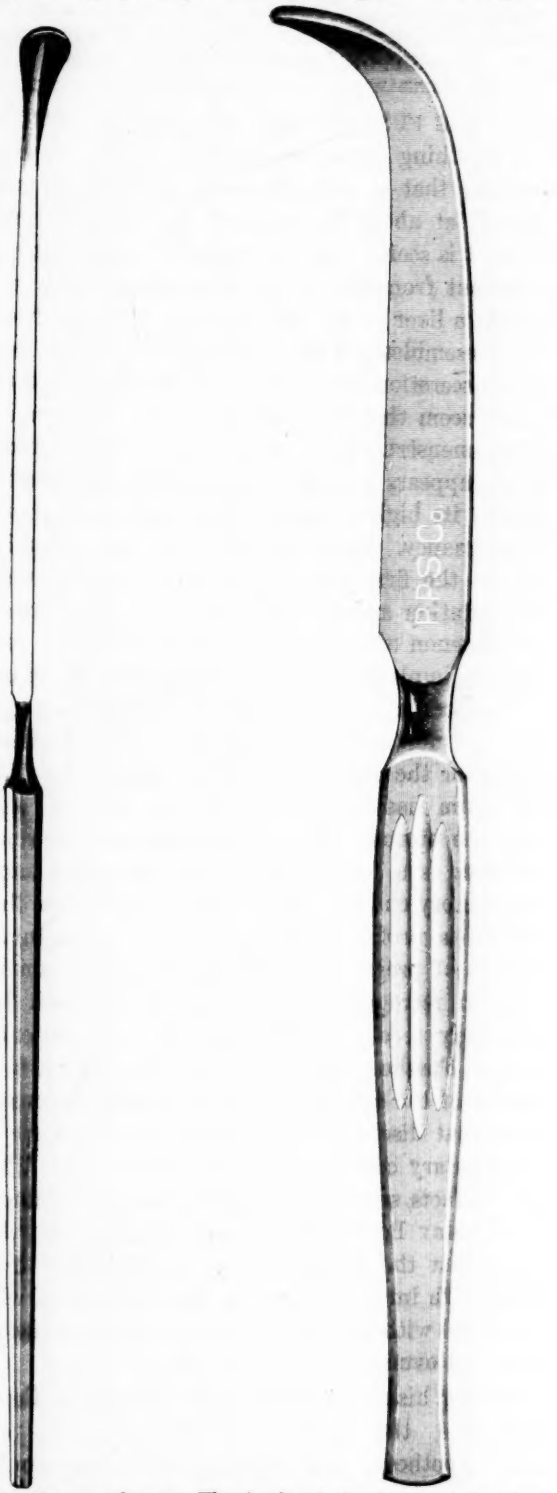
Sylvius the Medical Grammarian.—J. D. Sylvius, M.D., born in 1478, whose name is so associated with the anatomy of the brain, was a famous grammarian in his day and wrote a popular Latin grammar. The *Gaz. Méd. de Paris* states that he was the first to propose and use two distinct letters for i and j, and for u and v. He was also the originator of the French accents, distinguishing between the three sounds of e: e, é and è. Several members of the Estienne family, the celebrated printing firm, were physicians likewise.

New Instrument.

A PERITONEUM KNIFE.

JOHN R. COOK, M.D.
FAIRMONT, W. VA.

The accompanying illustrations show a new instrument, a peritoneal knife, which I have found a very convenient device for quickly enlarging the peritoneal opening after making the



opening in the usual way. The beak of the knife slides just under the peritoneum, hugging the same closely, and in this way all danger of wounding the intestines is eliminated.

I also find it very convenient in enlarging the abdominal ring in operations for the reduction of hernia. As will be seen, the blade is long and will divide all tissues, if necessary, from within outward.

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SATURDAY, SEPTEMBER 12, 1903.

THE FUNCTION OF THE CORPUS LUTEUM.

Everything about the structure of the corpus luteum suggests that it is of glandular nature. If one is examined at about the time of the implantation of the ovum it is seen to consist of rows of succulent cells radiating out from the center, resembling closely the structure of a liver lobule, not the cortex of the adrenal; that is, it resembles a true secreting gland. If it has an internal secretion such as the other organs it would naturally seem that this secretion must play some part in either menstruation or pregnancy, or more likely both, for it appears and disappears with menstruation, and reaches its highest development during the first months of pregnancy. This last indicates most probably a relation to the first phenomena of pregnancy, such as the implantation and the development of the ovum. This phenomenon of the preparation of the uterus for the reception, implantation and development of the ovum has always been mysterious, but it has also been evident that it could not be brought about by the fertilized ovum itself, for the changes are most rapid at the time when the ovum has neither vascular or nervous connection with the uterus and when it is still far too small to be of effect as a foreign body. On the other hand, these preparatory changes in the uterus occur when the corpus luteum is proliferating most rapidly, and in the later months of pregnancy when the corpus luteum is beginning to retrogress uterine growth is much less, and seemingly secondary to the rapid enlargement of the ovum. Furthermore, all animals that have a uterine insertion of the egg have a well-developed corpus luteum; those that discharge the undeveloped egg have either a rudimentary corpus luteum or none at all. These suggestive facts seem to have first been put together by the late Gustav Born, who developed from them the hypothesis that the corpus luteum of pregnancy must be a gland with internal secretion, the function of which was connected with the implantation and development of the fertilized ovum.

During his last sickness he requested L. Fraenkel to undertake the work necessary to the proof of this hypothesis and Fraenkel's[1] recent publication of his study is most interesting, and seems to constitute a distinct addition to our knowledge of the puzzling phenomena of menstruation and ovum implantation. Not only was Born's idea found to be correct, but it was found to be but part of a general law, namely: The corpus luteum during the years of generative activity produces through its internal secretion increased size and turgor of the uterus, as well as the periodic monthly hyperemia. This secretion accomplishes favorable conditions for insertion and growth of the ovum, or, impregnation failing to occur, it produces menstruation. If corpora lutea are lacking atrophy of the uterus occurs, and menstruation is absent. The condition of the uterus before puberty as well as after the climacteric depends on the absence of corpora lutea. In determining these facts rabbits were used, since in them the time of occurrence of the various series of events in the early stages of pregnancy have been pretty well worked out. It has been long known that removal of the ovary during the early part of pregnancy prevented maturation of the ovum, but Fraenkel found that a similar result was constantly obtained by simply burning out the corpora lutea, leaving the rest of the ovary intact; if a small part of the yellow bodies was left pregnancy was not always checked. In rabbits this influence seems to last through about twenty days of pregnancy, which is comparatively longer than is the case in women, since operative removal of ovaries as early as the third month has not always checked pregnancy. The effects produced by the corpus luteum seems to be chiefly through its influence on nutrition. As much atrophy of the uterus was found to follow simple destruction of the corpora lutea as after complete removal of the ovaries. A number of cases were found in the literature that seemed to Fraenkel to indicate that abortion in women with ovarian tumors has resulted from involvement or injury of the corpus luteum. There are also several instances of hydatid mole occurring in women with bilateral ovarian tumors, probably too many to be dismissed as merely coincident.

The relation of these bodies to menstruation was shown by burning the corpus luteum of menstruation found in the ovaries of women having regular periods, who were being operated on for malpositions or similar troubles that did not interfere with the observations. This addition to the operation is harmless, since such corpora naturally undergo resolution. The result in eight out of nine cases was that the next menstruation that was due was skipped, the succeeding menstruation occurring regularly as before. This seems to warrant the inference that the corpus luteum of one menstruation causes the next menstruation, in some way as yet not known.

When summed up it will be found that these studies simply enabled us to localize certain influences that the ovary has long been known to possess in the corpora lutea. The next step in order is the isolation of the active substance that the lutein cells secrete into the blood, as has been done with the thyroid and adrenal, and then we shall wish to learn how it acts, whether by vasomotor changes, or by directly affecting metabolism in the uterine tissue.

1. Archiv f. Gynaekol., 1903, lxviii, 438.

A certain practical result has already been found. Fraenkel was able in nearly all cases of operatively produced premature climacteric to greatly modify the symptoms by administration of lutein tissue from the cow, while at the same time further establishing his experimental results. Such lutein tissue is not difficult to obtain, since a large part of the bovine ovary consists of corpus luteum, and the results that he publishes warrant further trial of the substance as indicated by various conditions, particularly since it has been found to be harmless in any case.

MODERN LONGEVITY.

At the late actuarial congress in New York City, the subject of improved longevity was discussed and certain views expressed that have caused some sensational newspaper comments. It was declared by one speaker, according to the press reports, that the increase of average longevity was associated with a general degradation of the race. The increase of vitality was not in the strong, the results of sanitary reforms and of medical advances in the management of disease were only a diminution of mortality of the weakly and consequently a reduction of the general average of vigor and physical well-being in the mass. In other words, it is an interference with the process of natural selection by which the races of animals, man included, advance from the lower to the higher grades of physical perfection and being. This is not a newly discovered truth; it has long since been pointed out that mankind, especially in its social and recent development, does not come under the usual rules of natural selection—but naturally such an utterance captures the attention and is magnified by the press reporter.

There is more than one aspect in which this matter can be viewed. Undoubtedly we perpetuate the existence of many who are not the best samples of our race in the increased average longevity and the racial physique may apparently suffer. The survival of the helpless, the insane and all the defectives who would succumb under less artificial conditions also add to our "burdens," but it seems to us an error to say that the general result is race degeneration. The evolution of the human species has been intellectual rather than physical and at his present stage of development man is, as an animal, a degenerate. Physically, he is a weakling compared to his fellow animal in the jungle and pasture, but his better organized brain makes him incomparably their superior and their master. On an economic basis alone, the Spartan system of destroying the weaklings in infancy or the less ancient method of accomplishing the same result by neglect and ignorance is a fallacy. Every infant that dies at birth or in its period of helplessness is an instance of wasted human labor, and every one that is carried over to its age of helpfulness and productiveness is a possibility for the advancement of the race. Why this possibility is not always realized is a sociologic, not a medical or actuarial problem.

It is quite possible if not, indeed, probable, as has been pointed out by a recent writer,[1] that, while the average longevity is increased under better sanitation and with the advances in medicine in civilized communities, the number of instances of extreme longevity is diminished, and that we will find most instances of extreme old age in the lower, but not the lowest grades of civilization. Absence of stress and worry are the chief favoring factors of extreme longevity, and these are not so commonly associated with the complex conditions of modern civilization as with former patriarchal or feudal conditions. There is, moreover, a very material reason for the apparent diminished number of centenarians in highly civilized countries, the evidence is better sifted, and, as we have before pointed out,[2] the errors of ignorant persons as to their own excessive age are more frequently excluded. Those countries that have the most reliable vital statistics report the fewest cases that have passed the century mark. The fact that we do have so many instances of extreme age under modern conditions, together with an increase of average longevity, is good evidence of what the advance of medical science has done for the race. The further fact that the weaklings are preserved does not overbalance the general gain, and the prophecy of race degeneration from this cause may be safely disregarded.

THE SIMILARITY OF SERUM COMPLEMENT AND THE DIGESTIVE ENZYMES.

While the action of complement has long been likened to that of a ferment, that it is such, or is the same as the ordinary enzymes with which we are familiar, has never been established. It is strikingly like the proteid dissolving enzymes, especially trypsin, in the following particulars: It dissolves proteid substances, such as the bodies of red cells, of bacteria, or for that matter any other sort of cells to which it may be attached by a suitable amboceptor; it is not entirely specific for different substances; it acts best in a medium with a certain degree of alkalinity; it is destroyed by a degree of heat quite comparable to that destroying enzymes. On the other hand, it has not yet been demonstrated that cell solution by serum leads to the production of the various digestion products of proteolysis by which trypsin or other proteases are characterized. The known relation of complement to the leucocytes has suggested that it might be the same as the protease with which the leucocytes accomplish their remarkable feats of solution of digestible foreign and dead substances. The fundamental importance of complement in resistance to bacteria through bacteriolysis makes any light on its nature of particular value, and, therefore, the demonstration by Delezenne[3] of the similarity of action of the pancreatic and intestinal juices with that of the amboceptor and complement in producing cytolysis is of interest.

1. J. M. French, Med. Exam. and Prac., August, 1903.
2. THE JOURNAL, xl, p. 995.
3. Comptes Rendu Soc. Biol., 1903, No. v. 171.

We have recently spoken of the discoveries in the field of pancreatic digestion, showing that the enterokinase of the intestinal juice is essential to tryptic action, because it makes active the otherwise inactive trypsinogen which the pancreas secretes into the intestine. This action of enterokinase on trypsinogen Delezenne shows to be quite similar to that of amboceptor on complement, and he does it in the way that has yielded most of our information concerning complement, through a study of hemolysis by pancreatic juice. If red corpuscles that have been thoroughly washed with salt solution are placed in inactive pancreatic juice, that is, fresh pancreatic juice obtained pure through a fistula without coming in contact with the intestinal secretion, they are not at all affected for several hours. Pure intestinal juice, with its contained enterokinase, agglutinates them, but causes no hemolysis whatever. On the other hand, mixtures of the two, in which there is an active trypsin, dissolve the corpuscles very quickly. That this action is similar to that of amboceptor and complement the following experiments show: Red corpuscles are placed in each of the two tubes, one containing only intestinal juice, the other only inactive pancreatic juice, and they are allowed to stand in the cold for two hours. Then the corpuscles are repeatedly washed in salt solution, which frees them from any enterokinase or trypsinogen with which they are not united by other than physical means. If, now, the corpuscles that have been treated with enterokinase have inactive pancreatic juice added to them they are promptly dissolved, showing that the enterokinase had been combined with the corpuscles in a manner preventing it from being washed away, and from this site had made the trypsinogen active. On the other hand, when enterokinase was added to the corpuscles that had been treated with trypsinogen no dissolution of the corpuscles occurred, showing that the trypsinogen had been washed out completely, not having been united as had the enterokinase. In other words, enterokinase acts like amboceptor, uniting the corpuscles to the trypsinogen, which behaves like complement.

Whether the usual method of action of pancreatic juice in dissolving proteids is similar to this or not could not be finally determined, for albuminous bodies, particularly fibrin, have a way of entangling enzymes which makes it impossible to wash all the enzyme out, so that the above described experiments on red corpuscles could not well be repeated on foodstuffs. However, as far as experiments could be performed they indicated that this is the mechanism of pancreatic digestion. Ehrlich's conception of intracellular food receptors is thus shown to be very possible, indeed. As to the question of the proteolytic nature of complement as it exists in the blood, Delezenne's experiments seem to give rather a negative answer, at least so far as any identity with trypsin is concerned. In hemolysis by enterokinase and pancreatic juice the hemoglobin is not only liberated from the stroma of the red cells, but also decomposed and hematin is formed, whereas in hemolysis by serum the action seems to be limited to the liberation of the hemoglobin.

MEDICAL DEFICIENCY IN THE SOUTH AFRICAN WAR.

The report of the Royal Commission on the South African war takes up at some length the question of the medical management. While this subject has been treated by the special commission in 1900, they nevertheless again discuss it and find occasion for criticism of some defects similar to those which were developed in our brief Spanish war, such as insufficient personnel, defective sanitary organization, imperfect transportation facilities, etc., and some that we did not hear of, such as antiquated and cumbersome supplies, medicines twenty years old and instruments that should only be found in museums at the present time. We had more excuse for our deficiencies; we had a little army of 25,000, fairly well equipped, but this equipment and personnel could not be extended impromptu over a volunteer army of 250,000. In England they have a standing force of between 200,000 and 300,000 men, much of it in active service in some parts of the world all the time, and there would seem to be less reason why the defects above mentioned should exist in their case than in ours. The point is made that in a country with such facilities for supplying everything at need, it is useless to try to keep up large stores until they become antiquated and comparatively non-effective. Further, with colonial extension requiring more or less constant active service, it is reasonable to ask why the government should not be more ready for such emergencies as the Boer war. It is true the demands were extreme, and considerable excuse can be given, but the fact that the equipment of the colonial contingents and of the Boers themselves was generally so much better in many respects makes it appear that there had been too much red tape and official neglect somewhere. We do not mention the report as anything satisfactory to us because misery loves company, but simply because it is our business to learn as many valuable lessons as possible from other's experience as well as from our own.

THE LUST OF SLANDER.

Under the above heading, the *British Medical Journal* comments, July 25, on an appeal made the week previous by a deputation from the British Union for the Abolition of Vivisection before the Home Secretary of Great Britain. The deputation not only asked for a more rigid enforcement of the laws regulating vivisection, but for the enactment of more stringent ones. The deputation made use of the old arguments, and, of course, brought in the threadbare one to the effect that Sir Frederick Treves had stated that his experiments on animals had not been of service, for when he went to South Africa and operated on the soldiers the results obtained were quite different. As it happened, the Home Secretary knew something about the matter, for he stated that Sir Frederick Treves had repudiated the statement. He also informed them that the laws were being enforced and that he, for one, would not advise more rigid laws. Among those who appeared for the antivivisectionists

was a reverend gentleman who stated that watching these operations, i. e., vivisection, "induced a callousness that in time, in some cases, developed into a feeling of positive pleasure," and so on. The *British Medical Journal* analyzes the arguments presented and shows the basis for much of the "rot" that is being used as arguments by these zoöphiles. Among other arguments referred to is one credited to a "Dr. Leffingwell, an American antivivisectionist," a name that sounds very familiar in connection with antivivisection literature of this country. It occurs in an article which appeared in the *Abolitionist*, the official organ of the British Union for the Abolition of Vivisection, for 1901, entitled "A Terrible Revelation: Vivisection and Sexual Psychopathy," the terrible revelation being that "vivisectors make use of the sight of dying animals or torture animals to stimulate their lust." This statement, it is reported, is made on the authority of the above-mentioned American and by some unnamed person whom he cites as saying: *"En France on prolonge les vivisections pour se procurer d'infames plaisirs."* *American Medicine*, in commenting on this Leffingwell accusation, August 22, says:

It suggests a depth of degradation to which not even an antivivisectionist, and least of all an American, could fall. And now in the name of decency we call up Leffingwell—until he cleans himself not even Mr., surely not Dr.—to do one of two things: categorically and absolutely to deny that he ever made such a charge, or prove, up to the hilt, that it is true. Silence, or any characteristic antivivisectionist prevarication and indefiniteness, will leave him branded as poltroon and liar.

Thus far we have seen nothing from the Leffingwell referred to and we are waiting patiently. It is barely possible that he does not read medical journals, or possibly only such parts as may be twisted around to suit him in some of his "arguments." The old saying that "silence gives consent" we shall take to be true in this case, and certainly Leffingwell will be proud of the honor attached to him in having made such a dastardly accusation.

Medical News.

DISTRICT OF COLUMBIA.

Twelve Passed Examination.—Out of 22 physicians recently examined for appointment as medical inspectors of public schools, six passed; and of 11 examined for appointment as physicians to the poor six also passed.

Washington Suicides.—During the fiscal year just ended 54 deaths occurred by suicide, 22, or nearly 70 per cent., more than for the previous year. The revolver was used in 15 cases, carbolic acid in 11, and strangulation in 9.

Nonagenarian Illicit Practitioner.—Brooks Johnson, a colored individual claiming to be 98 years old, was recently arrested on the charge of practicing medicine without a license. The complaints allege that he offered to remove "spells" for $25.

Application Denied.—Dr. William C. Woodward, secretary of the Board of Medical Supervisors of the District of Columbia, has informed the commissioners that the board refuses to grant Salina Armstrong Hopkins, M.D., a license to practice medicine in the District, as the papers filed by her are not sufficient to warrant the issuance of a license without fee or examination.

Weaning of Children Fatal.—Dr. William C. Woodward, health officer, in commenting on the alarming death rate among infants from diarrheal diseases, says:

Weaning of children during the heated season is seldom recommended as a matter of choice, but only as a matter of necessity. In most instances the deceased infants were said to have been well developed and healthy and to have thriven so long as they were fed on mother's milk. The fatal change began with the substitution of other foods. The cause most commonly alleged for such substitution was the necessity under which the mother found herself of earning her own livelihood. Condensed milk seems to have been selected in most cases because of its convenience and not because of any intelligent belief in its superior merit. No effort was made to skimp on the price of this article. In only one case was a cheap brand used, and that was by no means the cheapest.

Those having the care of the babies seem generally to have been ignorant of the necessity for a proper water supply for such children. Little water was given as a rule, and even that small amount was Potomac water, unboiled. Nipples on bottles were but fairly well cared for. The sanitary condition of many of the premises in which these children lived was bad.

ILLINOIS.

Library Donated.—Charles C. Truesdale has donated the medical library of his father, the late Dr. Calvin Truesdale, to the Rock Island public library.

Anthrax Reappears.—Anthrax has broken out in the herd of cattle at Staple Farm, north of Palatine. Two years ago an outbreak of the same disease occurred in this section.

Personal.—Dr. Buenaventura H. Portuondo, Belleville, has been appointed commissioner of Cuba to the World's Fair, and also consul of Cuba at St. Louis.——Dr. Oscar Yarnell, Cerro Gordo, has gone to Europe.

Chicago.

Pasteur Institute Incorporated.—The Chicago Pasteur Institute has been incorporated by A. P. Lagorio, Carlotta Lagorio and B. G. Bruno, with a capital stock of $2,000, to treat hydrophobia.

Arrests.—Dr. L. Slominski and F. Eisen-Bockius have been arrested, charged with criminal malpractice.——Dr. Alfred Dahlberg has been arrested, charged with selling "cocain and other narcotics without a physician's prescription."

New Location for Temperance Hospital.—The directors of the Frances E. Willard National Temperance Hospital have decided to erect a $75,000 building on Lincoln street, between Polk and Harrison streets. The lot has been paid for, and there is $25,000 for a building fund on hand.

The American Association of Obstetricians and Gynecologists meets in Chicago, September 22 to 24. The local members of the association are making arrangements to entertain those who attend with lunches, banquets, etc. The meetings will be held in the law library of the Northwestern University Building, corner of Dearborn and Lake streets.

MARYLAND.

Baltimore.

August Deaths.—During August there were 860 deaths, 39.77 per cent. being of persons under 5. Of the causes of death the following were most prominent: Diarrhea and enteritis, 136; tuberculosis, 101; heart disease, 55; Bright's disease, 48; cancer, 37; pneumonia, 30; typhoid fever, 26; apoplexy, 24; scarlet fever, 11; whooping cough, 10; dysentery, 9, and diphtheria, 7.

Johns Hopkins Faculty Changes.—The following changes have been announced in the Johns Hopkins Medical School: Dr. Norman McLeod Harris has accepted a position in the bacteriologic department in the University of Chicago. Dr. Glanville G. Rusk, assistant in psychiatry, has accepted a position with the Pathologic Institute of New York. Dr. Burton D. Myers, assistant in anatomy, has an appointment as instructor in anatomy in the Indiana State University.

Personal.—Dr. Thomas Cullen has gone to his camp in Canada to spend a month. He has as his guest Dr. Howard A. Kelly, who returned from Europe August 29.——Dr. L. Ernest Neale has returned from Europe.——Dr. John Ruhräh has returned from a trip to England, Ireland and Scotland.——Dr. Joseph E. Teard is at Governor's Run on Chesapeake Bay.——Dr. William B. McDonald is at Capon Springs, Va.——Dr. Albert Shelley has gone to England.——Dr. J. Staige Davis is at Eaglesmere, Pa.

Johns Hopkins Ex-Internes.—Movements of former members of the staff are announced as follows: Dr. J. Auer has gone to Chicago to practice; Dr. J. B. Briggs has been made a member of the permanent staff of the hospital; Dr. Camillus Bush has been appointed assistant resident surgeon; Dr. J. W. Churchman is to be associated in practice with Dr. Hugh Young, Baltimore; Dr. H. W. Cook has been appointed resident physician at the Memorial Hospital, Richmond, Va.; Dr. M. L.

Haviland will practice in New Jersey; Dr. C H. Horst is to remain temporarily at the hospital. Dr. E. W. Meisenhelder has received an appointment in the Varnes Hospital, Washington, D. C.; Dr. C. B. Wright will remain temporarily at the hospital; Dr. F. W. Lynch, resident obstetrician, is going to the University of Chicago, and Dr. H. T. Marshall, assistant resident pathologist, is going to Montana on a mission for the United States Bureau of Animal Industry.

MASSACHUSETTS.

Personal.—Dr. George L. Richards, Fall River, is recovering from typhoid fever.

Smallpox Difficulties.—The board of health of Fall River is having much difficulty in stamping out smallpox. Recently a house was forced open by the police with axes and two men ill with the disease were found hidden, and removed to the hospital.

Mortality of Boston.—The mortality in Boston still continues low for this season of the year. The total number of deaths for the four weeks ended September 5 was 798, 42 less than during the same period last year and an annual rate of 17.23 per 1,000. Deaths under one year numbered 248; under 5 years, 302. There were reported 17 deaths from diphtheria, 2 from scarlet fever, 15 from typhoid fever, 78 from tuberculosis, 3 from pertussis, 63 from heart disease and 25 from marasmus.

Tuberculosis Aid and Education Association.—A new association whose objects are "to cure at home if possible persons suffering with tuberculosis; to relieve with food, so far as possible, all needy tuberculous persons; to educate the entire community in the care and prevention of this disease; to promote the establishment of hospitals for hopeless cases," hopes soon to commence active work in Cambridge. Mrs. Rufus P. Williams is chairman of the committee; Dr. John L. Hildreth, Cambridge, is chairman of the advisory board, and Dr. Edward O. Otis, Boston, advisory expert.

The New Harvard Medical School.—The plans for the first group of buildings of the New Harvard Medical School recently filed call for five buildings, fireproof, with white marble walls. The administration building, 166 by 124 feet, and 5 stories high, will cost $535,000; the physiologic laboratories, 196 by 148½ feet, 3 stories, $421,000; the laboratories for bacteriology and pathology, 185 by 128 feet, 3 stories, $390,000; histology and anatomy get a three-story building, 196 by 148 feet, and costing $396,000, while pharmacology and hygiene will be studied in a three-story building 185 by 108 feet, to cost $346,000. All are to be erected beyond the fens on Longwood avenue, on the lot which extends through to Francis street and Huntington avenue.

Out-Patient Department Opens.—September 1 the new outpatient building of the Massachusetts General Hospital was opened. It is a large three-story building, on the western side of the hospital grounds, with entrance on N. Grove street. It forms part of the new group of buildings already planned, and partly built, which will entirely inclose the open grass plot, on one side of which stands the old hospital designed by Bullfinch. This new building is complete in all its equipment, special efforts being made for asepsis, extension apparatus for specialists and the best means for clinical instruction. A unique feature is the card catalogue system of keeping case records, which are all kept at the central office and sent to the treatment room by dumb-waiter and messengers. Daily notes are made by the physician and the record thus returned to the central office and filed. An abundance of cross references will make this centralized record bureau of great value to anyone looking up special diseases.

MICHIGAN.

Smallpox.—The State Board of Health reports smallpox present at 37 places in the state.

Donation to Hospital.—From the receipts of the firemen's tournament recently held at Calumet $1,000 has been given to the building fund of the new St. Joseph's Hospital.

Michigan Standard Too Low.—The president of the Canadian Medical Association, in an address, declared that although Michigan was constantly raising her medical standard it was still too low even to be considered by the Ontario Medical Council.

Sent to Jail.—Dr. Richard L. Cornwell, Montague, has been sentenced to thirty days' imprisonment on a charge of nonsupport.——Paul Newton, claiming to be a "professor in Belleview Hospital, Chicago," was arrested at Benton Harbor, September 2, charged with obtaining $200 by fraud from a farmer at Sodus on an alleged contract to cure the farmer's wife of asthma. Being unable to furnish bail, he was sent to jail.

Personal.—Dr. Edward P. Wilbur, Kalamazoo, has been elected a member of the board of censors of the Kalamazoo Academy of Medicine, vice Dr. John H. McKibbin, removed from the city.——Dr. William A. Stone, Kalamazoo, has been elected to fill a vacancy in the board of censors of the Kalamazoo County Medical Society.——Dr. William J. O'Reilly has been elected president and Dr. Michael D. Ryan secretary of the medical staff of St. Mary's Hospital, Saginaw.

NEBRASKA.

Scarlet Fever Closes School.—The German school, 12 miles northwest of Beatrice, in Hanover Township, has been closed on account of the prevalence of a severe type of scarlet fever.

Personal.—Dr. Elias Holovtchiner, Omaha, has returned after a trip of three months in Europe.——Dr. Irwin C. Sutton, Shubert, will take two years of post-graduate work in Philadelphia and Europe.

Downs in the Toils.—Dr. Charles W. Downs, Omaha, was recently haled before the State Board of Health with having violated a statute by distributing pamphlets or other advertising matter detrimental to public morals. Dr. Downs pleaded ignorance of the law, and his case was allowed to go over until the September meeting.

Physicians Object to Law.—Omaha physicians are said to object to the provision of House Bill 63, requiring reports of contagious diseases to be made to the State Board of Health. The act makes it obligatory on attending physicians to file such reports with the board, at their own expense. The act imposes a penalty for each violation of its provisions. In addition the state board has adopted a rule requiring all these reports to be filed within twenty-four hours and all cases of smallpox, scarlet fever, diphtheria and meningitis to be quarantined not less than fourteen days and until such time as the case shall cease to be infectious. After the patient is released a release card must be filled out and sent to the board.

NEW YORK.

Milk Testing.—The monthly report of the state health department devotes much space to methods of testing milk intended for the use of infants.

Consumption Decreased.—It is reported that deaths from consumption in New York have decreased 40 per cent. since the health department began its crusade against the disease in 1891.

Lawton Hospital Opened.—Lawton Hospital, Herkimer, erected by Levi Lawton at a cost of $5,000, and equipped by other residents of the village at an expense of $3,000, was dedicated August 29.

Syracuse University Changes.—Drs. Tennyson L. Deavor, H. B. Doust and G. S. Doust have been made instructors in and demonstrators of anatomy; Dr. George A. Hanford is the new lecturer on chemistry and physiologic chemistry, and Dr. W. Dewey Alsever has been appointed instructor in physical diagnosis.

Deaths in Cities.—Vital statistics show the death rate in July to have been lowest in Ogdensburg, 5.4 per 1,000 and highest in Jamestown, 27 per 1,000. Of the larger cities Albany was highest (20.7), Rochester was lowest (15.7), with Syracuse (15.8), Buffalo (16.6), and New York (19.6). There were no cases of smallpox, though the average for five years has been 25.

Buffalo.

Personal.—Dr. Ernest Wende is on a fishing trip in Northern Canada.——Dr. Albert T. Lytle is taking a trip up the lakes.——Dr. James W. Putnam has returned from Prout's Neck, Me.——Dr. Edward L. Frost has returned from Muskoka.——Dr. Eugene A. Smith has resumed practice after an extended stay in the Adirondacks.

Adulterator Fined.—William Hipkiss, a milk dealer, pleaded guilty and was fined $50 and costs in the Municipal Court for putting formaldehyd in cream as a preservative. Mr. Hipkiss made an affidavit that the material used was bought under the name of "Special in Preservative" from the Preservative Manufacturing Company of New York. The State Department of Agriculture will investigate the matter mentioned in Hipkiss' affidavit.

New York City.

A Narrow Escape.—Dr. George G. Rambaud, director of the Pasteur Institute, and his wife had a very narrow escape from severe injury in a collision between their automobile and an electric car.

Free Antitoxin.—The health commissioner has asked for $70,000 for diphtheria antitoxin, and recommends that hereafter the sale of antitoxin by the department be stopped and that the preparation be furnished without expense to residents of the city.

Personal.—Dr. Edward H. Giles, while driving near Goshen, Mass., sustained a fracture of the arm and two ribs and a sprain of the hip in a runaway accident.——Dr. Frederick L. Flynn, house surgeon of St. Catherine's Hospital, Brooklyn, has resigned and has been succeeded by Dr. Lewis Schaefer.

PENNSYLVANIA.

Typhoid at Carbondale.—Up to noon, August 25, 47 cases of typhoid fever had been reported to the Carbondale Board of Health.

Staff Appointed.—Drs. Samuel C. Stewart, Francis G. Bennett and Bert E. Leipold have been appointed to the medical staff of the Clearfield Hospital.

Ambulance Struck by Locomotive.—While conveying a patient to the McKeesport Hospital, an ambulance was struck by a switch engine at Riverton and demolished; the ambulance surgeon was badly bruised, the driver thrown into the air and cut and bruised, but the patient escaped injury.

Pure Food Crusade.—August was a record-making month for the State Dairy and Food Department. About $6,500 was collected in fines for adulterations, and about 200 prosecutions were begun. About 100 dairymen of western Pennsylvania have recently been prosecuted and fined for putting formaldehyd in milk, the fines aggregating over $5,000. The president of a prominent brewing firm of Philadelphia is held in $500 bail on the charge of adulterating beer with salicylic acid. Several grocery firms when arraigned acknowledged selling adulterated goods, brandy, vinegar, lemon extract, etc.—though in some cases it was done ignorantly—and paid fines of $50 each and costs of court. The activity of the dairy and food commissioner is generally highly commended. Although the prosecution of firms selling impure articles in ignorance—sometimes under guarantee of their purity—seems a hardship, yet in the end it will perhaps prove an efficacious method of ridding the market of spurious goods and protecting the public from injurious and poisonous foods.

Philadelphia.

Memorial Services.—On August 30 memorial services were held in honor of John D. Laukenau, the benefactor and president of the German Hospital for so many years, the occasion being the third anniversary of his death. The board of trustees and other hospital officials and invited guests attended the service held in the hospital.

Instruction to Mothers.—Talks to mothers on the feeding and care of infants by members of the profession who volunteered to do so, are from time to time given under the auspices of the Bureau of Health. The plan seems the beginning of a practical method of instructing mothers in the essentials of the rearing of infants—a subject on which there is much gross, not to say criminal, ignorance.

Municipal Hospital Changes.—Dr. Jay F. Schamberg, on August 31, tendered to the Department of Health his resignation as assistant physician to the Municipal Hospital. Dr. B. Franklin Royer, on September 1, entered on his duties as chief resident physician of the hospital, thus dispensing with the necessity of an assistant physician. Dr. William M. Welch, who becomes consulting physician to the institution, is to receive a salary of $2,000 a year. Dr. Royer will receive a salary of $2,500 a year.

Much Typhoid.—A surprisingly large number of cases of typhoid fever are reported in the city. For the week ended August 29 there were 133 new cases, for the succeeding week 104. Officials are somewhat at a loss to account for the source of the contagion because some wards supplied with filtered water show the largest number of cases. The Bureau of Health is making especial study of the cases to determine the source of the infection.——Smallpox has decreased, there being 10 new cases for the last week of August, and 12 the following week.

Improved Milk Supply.—Much has recently been done and is now in progress to improve the milk supply of the city and state. Dairy and Food Commissioner Warren is carrying on an active warfare against impure foods, including milk. Additional city milk inspectors have been appointed and all are instructed to do their work thoroughly and carefully. The public has been invited to bring samples of milk to the Bureau of Health and to have them examined free of charge. Milk shops have been closed when they have failed to keep up to a proper standard of cleanliness.

To Stamp Out Smallpox.—More drastic measures have been adopted to stamp out smallpox. All cases of smallpox will be removed to the Municipal Hospital, none will be treated in their homes, as has sometimes been allowed. The inmates of the house in which a case occurs will also be sent to the Municipal Hospital for disinfection. While the latter is being accomplished the house will undergo fumigation, the effectiveness of the latter to be determined by a bacteriologic test. The entire process will take about 24 hours, after which those who have been exposed will be allowed to pursue their vocation, provided they have been successfully vaccinated. If vaccination is refused, quarantine will be imposed.

RHODE ISLAND.

Vanderbilt Ward Opened.—On August 1 the Newport Hospital received the new Vanderbilt ward, said to have cost $250,000. Other gifts from this family make the total received from them by the hospital over $500,000.

Diphtheria at Naval Station.—There are said to be about fifty cases of diphtheria at the naval training station at Harbor Island, and a number of cases developed on the *Monongahela* while she was out on a cruise for a month.

Another Glanders Death.—The third death from glanders in the state occurred in Warwick August 18. The patient contracted the disease from his horse, ill with the disease, which he was treating. The first lesion was an ulcer of the face near one eye.

TENNESSEE.

Released on Bond.—J. D. Alston, a colored physician of Nashville, arrested on the charge of criminal malpractice whereby the death of a young negress is alleged to have been caused, has been released on bonds of $3,000.

Health of Knoxville and Nashville.—In July 14 cases of smallpox and 2 cases of measles were reported in Knoxville. The death rate for the month was at the annual rate of 11.40, or nearly fifty per cent. less than for the preceding month. Tuberculosis led the death-causes.——In Nashville there were 182 deaths during the month, and 112 births were reported.

Personal.—Dr. S. Walter Woodyard has been appointed a member of the pension examining board at Greenville.——Dr. Oscar Copeland, Chattanooga, has returned after a tour of Europe.——Dr. Alfred S. Horsley, Knoxville, has been appointed division surgeon on the Mexican International Railway, with headquarters at Monclova.——Dr. and Mrs. Owen H. Wilson, Nashville, are in Japan.——Dr. D. T. Gould has been elected house surgeon of the Nashville City Hospital.

Vanderbilt Faculty Changes.—The medical department of Vanderbilt University, Nashville, announces the following changes in its faculty: Dr. George C. Savage has been made secretary of the faculty; Dr. George H. Price, professor of physiology and diseases of the eye, ear, nose and throat; Dr. Samuel S. Briggs succeeds Dr. A. Bennett Cooke as professor of anatomy; Dr. Owen H. Wilson has been made clinical professor of diseases of children; Dr. W. F. Clary, Jr., assistant to the chair of medicine; Dr. W. C. Dixon, assistant to the chair of gynecology; Dr. Albert W. Harris, assistant demonstrator of anatomy and assistant to the chair of abdominal surgery; Dr. William Litterer, assistant to the chair of materia medica and therapeutics, and demonstrator of histology and pathology.

TEXAS.

Appropriation for Post Hospital.—Authority has been granted for the construction of a hospital at Fort Bliss to cost $20,000.

Epileptic Colony Opens in October.—The state board of managers for the epileptic colony announces that the buildings will be completed and ready for the reception of patients about October 1.

Trouble Brewing.—Many physicians and midwives are ignoring the law passed by the last legislature providing that all

deaths and births be reported to the county clerk. The State Health Department announces that failure to comply with the law may be followed by prosecution.

Personal.—Dr. Benjamin F. Chambers, Palestine, who was recently assaulted and seriously injured, is making a good recovery.——Dr. Alva W. Carnes, Hutchins, physician at the Dallas County farm, is suffering from a dislocated shoulder and a fractured arm as the result of a runaway accident.——Dr. H. C. McClanahan, Manor, has been appointed assistant superintendent of the Gardner Sanitarium, Belmont, Cal.

WISCONSIN.

Insanity Increases.—The report of the State Board of Control for the year ended June 30 shows that there were 197 more insane patients in the state than in the previous year, the respective aggregates being 5,372 and 5,175.

Tuberculosis Leads.—The death-causes in Wisconsin for the past year, in order, were as follows: Tuberculosis, pneumonia, organic heart disease, accident, kidney disease, gastroenteritis, cancer, typhoid fever, cerebral congestion, hemorrhage and diphtheria.

Appoints Tuberculosis Commission.—Governor La Follette has appointed a commission, consisting of Dr. Gustav Schmitt, Milwaukee, Prof. H. L. Russell, bacteriologist at the state university, Madison, and Dr. Michael Ravn, Merrill, whose duty it is to determine the advisability of the establishment of a state hospital for the treatment of tuberculosis in human beings.

Personal.—Dr. George Alfred Elliott, assistant physician at Lake Geneva Sanitarium, has resigned and has gone to Colorado on account of the ill health of his wife.——Dr. William J. Cronyn has been made professor of medical jurisprudence in Milwaukee Medical College.——Drs. Camillis E. Richards and William C. F. Witte, Milwaukee, have returned from Europe.

Right to Practice.—Dr. L. W. Zochert, Fond-du-Lac, has sued Dr. J. H. Blekking, Hingham, for the recovery of $1,000 on alleged breach of contract. The defendant, in consideration of $1,000 and $300 equity in property, is asserted to have given the plaintiff the entire field in the town of Hingham. A temporary injunction has been granted restraining Dr. Blekking from practicing medicine within an eight-mile radius of Hingham.

GENERAL.

Personal.—Dr. Archibald N. Sinclair has been appointed a member of the Board of Medical Examiners of the Territory of Hawaii, in place of Dr. C. L. Garvin, resigned.

Leprosy Scandal in Porto Rico.—The alarm caused concerning leprosy and the danger of its spread from the colony at San Juan has caused extensive investigation, which is expected to place the colony under proper conditions, and will result in the enforcement of regulations.

A Queer Coincidence.—In the obituary columns of this issue will be found the names of Drs. Thomas Palmer Wynn of Durham, N. C., and Alexander Montague Atherton of New York, and the same names appear under marriages. Dr. Wynn died from ptomain poisoning four days after his marriage and Dr. Atherton died from a throat trouble of long standing three days after he was married.

Yellow Fever Spreads in Mexico.—Yellow fever is reported to be spreading in the vicinity of Monterey, Tampico, Linares and Victoria, Mexico. In some places it is epidemic. The daily death rate is large. The Mexican Central Railroad has suspended operation between Monterey and Tampico by order of the Mexican government. Texas is enforcing her quarantine and endeavoring to exclude the disease.

Rumors of a Plague in Cuba.—Some epidemic of unknown nature but of great fatality was rumored to be raging in Daiquiri, an isolated town in the province of Santiago, Cuba, among men employed in the iron mines. The lay press has devoted columns and scare heads to it, but every authority they have thus far referred to has contradicted the rumors. The basis of the report is evidently the request sent to Columbia University and Jefferson Medical College for aid in diagnosis and treatment of malarial complications at the point mentioned. Dr. C. J. Finlay, chief of the Cuban Health Department, cables his denial of the exaggerated story and has sent Dr. Guiteras to Santiago to investigate.

The American Journal of Orthopedic Surgery.—The first number of this journal has just appeared. It is to be the official publication of the American Orthopedic Association. Its first issue is a handsome, well-illustrated number of over one hundred pages. The editorial committee consists of Drs. R. W. Lovett, Boston, B. E. MacKenzie, Toronto, and Harry M. Sherman, San Francisco. It will be published quarterly and replaces the Transactions, Vol. 1 of the Journal being Vol. XVI of the Transactions. If the contents of the first number are an indication of the permanent character of the Journal it certainly deserves the support of that portion of the profession that is interested in its special subject.

Government Wants Pure Milk.—The Agricultural Department, realizing the importance of the question of pure milk in the large cities, has issued a bulletin giving valuable suggestions with reference to the preparation and delivery of the supply. The bulletin calls attention to the fact that the ideal vessel for the conveyance of milk remains to be discovered. The following points are emphasized:

The registration of all dairies.
Official indorsement of properly conducted dairies.
Inspection of all herds, barns, dairy buildings, etc., once a month.
Better lighting, ventilation, drainage and cleanliness of cow stables.
Whitewashing the interior of stables.
Eradication of tuberculosis from dairy herds.
Branding of condemned cows.
Cows not to be given swill feed, etc.
Cows to be regularly cleaned.
Pasturage for city cows.
Delivery of milk and cream in sealed packages.

Increased Longevity.—The International Congress of Insurance Actuaries held its session in New York City. A prominent feature in the discussion was the admitted fact that people are longer lived now than formerly. This was attributed to the growth of hospitals, the advance in medicine and surgery and the more enlightened care of the poor and suffering, particularly the children. John K. Gore of Newark, N. J., presented statistics showing that during the last five years of the century there had been a very perceptible decrease in the mortality rate. From 1870-1874, the period including the fatal smallpox epidemic of 1872, there was an increase in the death rate at every age group but one. From 1880-1884, the rate was relatively high owing to the great prevalence and wide distribution of diphtheria, scarlet fever and measles. The influenza epidemic of 1891 caused an augmented death rate from 1890-1894. As to causes, it was stated that there had been a remarkable decrease from phthisis and a slight decrease from typhoid in the northern countries. Most of the other causes, affecting chiefly adult lives, show large increases.

The American Association of Obstetricians and Gynecologists will hold its sixteenth annual meeting in the Northwestern University Building, Dearborn and Lake streets, Chicago, Tuesday to Thursday, Sept. 22-24, 1903. At 7:30 p. m. Wednesday the annual dinner will be served at the Auditorium Annex, at $3.00 a plate. Those who will attend should notify the secretary. The program is as follows:

TUESDAY, SEPTEMBER 22, 10 A. M.

Relationship of the Colon to Abdominal Tumors. Dr. James F. Baldwin, Columbus.
Ectopic Pregnancy. Dr. Henry D. Ingraham, Buffalo.
The Value of Vaginal Cesarean Section, with Report of a Case. Dr. Martin Stamm, Fremont.
The Limitations of Cesarean Section. Dr. E. Gustav Zinke, Cincinnati.
The Gilliam Operation. A Clinical Contribution. Dr. Edward J. Ill, Newark.
Hysteria as a Result of Chronic Atrophic Parametritis. A Contribution to the Study of Nervous Disturbances. Dr. W. A. Freund, Berlin.

TUESDAY, SEPTEMBER 22, 2:30 P. M.

Report of a Fourth Consecutive Successful Operation for Acute Perforated Gastric Ulcer with General Infection of the Peritoneal Cavity. Dr. Henry Howitt, Guelph.
Should the Uterus and Ovaries Be Removed in Operating for Double Pyosalpinx? Dr. Carlton C. Frederick, Buffalo.
The Technic of Gynecologic Operations and Treatment. Dr. Albert Vander Veer, Albany.
The Indications and Technic of Vaginal Drainage for Suppuration in the Pelvis. Dr. Albert Goldspohn, Chicago.
Shortening the Round Ligaments by the Blunt Hook Method. Dr. Howard W. Longyear, Detroit.
Extravaginal Elongation of the Cervix. Dr. Marcus Rosenwasser, Cleveland.
Report of Abdominal Sections During Pregnancy. Dr. Xavier O. Weber, Pittsburg.

TUESDAY, SEPTEMBER 22, 7:30 P. M.

Study of the Symptoms and Surgical Treatment of Intestinal Perforation in Typhoid Fever. Dr. W. D. Haggard, Nashville.
Rational Treatment of Postpartum Infection of the Uterus. Dr. D. Tod Gilliam, Columbus.
Conservative Surgical Treatment of the Uterine Adnexa. Dr. Augustus P. Clarke, Cambridge.
Traumatic Rupture of the Intestines without External Marks of Violence, with Report of Cases. Dr. George S. Peck, Youngstown.

Penetrating Gunshot and Stab Wounds of the Abdomen, with Report of Cases. Dr. John Young Brown, Jr., St. Louis.

WEDNESDAY, SEPTEMBER 23, 9:30 A. M.

Surgery of the Ileocecal Valve for Non-malignant Disease. Dr. N. Stone Scott, Cleveland.

Infantile Uterus, Scanty Menstruation, Amenorrhea and Dysmenorrhea Cured by Stem Pessaries. Dr. J. Henry Carstens, Detroit.

Tuberculosis of the Female Genitalia and Peritoneum. Dr. John B. Murphy, Chicago.

Appendicitis. Dr. Walter P. Manton, Detroit.

A Demonstration of Two Interesting Specimens, with Brief Histories. Dr. Xavier O. Werder, Pittsburg.

WEDNESDAY, SEPTEMBER 23, 12 M.

Memorial Address on the Life and Character of William E. B. Davis. Dr. Lewis S. McMurtry, Louisville.

President's Address. Dr. L. H. Dunning, Indianapolis.

WEDNESDAY, SEPTEMBER 23, 2:30 P. M.

The Choice of Methods for Closing the Abdominal Incision. Dr. Edward Ricketts, Cincinnati.

Cysts of the Kidney Resembling Ovarian Tumors, with Cases. Dr. Rufus B. Hall, Cincinnati.

Hysterectomy in Infectious Diseases of the Uterine Appendages. Dr. Harry C. Deaver, Philadelphia.

Supravaginal Amputation for Fibroid Tumors, with Report of Cases. Dr. H. E. Hayd, Buffalo.

The Scope and Limitation of Myomectomy in the Treatment of Fibroid Tumors of the Uterus. Dr. L. S. McMurtry, Louisville.

Coincident Tubal and Uterine Pregnancy, with the Report of a Case. Remarks. Dr. Frank F. Simpson, Pittsburg.

THURSDAY, SEPTEMBER 24, 10 A. M.

Symptomatology of the Pelvic Musculature. Dr. Hugo O. Pantzer, Indianapolis.

Palliative Treatment of Cancer of the Cervix. Dr. Walter B. Chase.

Abdominal Versus Vaginal Hysterectomy in Carcinoma Where the Radical Operation is Warranted. Dr. John B. Deaver, Philadelphia.

An Analysis of Common Causes of Death Following Pelvic and Abdominal Operations. Dr. Joseph Price, Philadelphia.

Total Extirpation of the Vagina for Carcinoma. Dr. Charles G. Cumston, Boston.

The Use of Veratrum Viride in Surgical and Obstetrical Practice. Dr. Charles L. Bonifield, Cincinnati.

THURSDAY, SEPTEMBER 24, 2:30 P. M.

Anesthesia in Abdominal Surgery. Dr. J. J. Gurney Williams, Philadelphia.

Further Preliminary Notes on Ovarian Grafting. Dr. Robert T. Morris, New York.

Clinical Demonstration of Special Points of Surgical Interest. Dr. John B. Murphy, Chicago.

Emergency Abdominal Surgery at the Patient's Home. A Demonstration. Dr. W. G. MacDonald, Albany.

FOREIGN.

Typhus in Bavaria.—Four hundred cases of typhus are reported in two regiments of the Bavarian infantry at Hammelburg, Bavaria.

Ismailia Free from Mosquitoes.—It is reported in London that as a result of the measures for the extermination of mosquitoes in Ismailia, malaria has dropped from 569 cases in the period January to May, 1902, to 72 in the same period for 1903. It is predicted that malaria will practically disappear. Mosquitoes are rare and mosquito netting is almost made unnecessary. Work is still progressing on filling up pools and preventing stagnant water.

Homage to a Physician in Frankfurt, Germany.—Dr. T. Neuburger has practiced medicine at Frankfurt a. M. nearly half a century, and the arrival of his fiftieth professional anniversary was celebrated by his friends by a gift of $19,000. He added to the sum and has set it apart as a permanent endowment for scientific medical research to be known by his name. His latest contribution to medical literature was an article on the connection between sclerosis of the coronary arteries and affections of the heart muscle.

Propagation of Giants.—A large legacy was left by Count Alfred St. Ouen de Pierrecourt to his native city of Rouen on condition that provision be made for propagating a race of giants. The natural heirs began litigation, which has now resulted in an agreement that the city shall found an institute for giants, keeping a large fund in reserve and giving the balance to the legitimate heirs. It is proposed to maintain a score or more of giant couples, establishing workshops for them and conditions favorable for scientists to observe the result of the progeny of giant couples. Dr. H. Meige of Paris published a protest against the idea some months ago, claiming that giant growth is pathologic. His remarks on the subject were reviewed in THE JOURNAL at the time, page 274 of the last volume.

Tragic Sequel to the Muehlhausen Contract Practice Trouble.—Our German exchanges have carried for many weeks a notice warning medical men not to enter into negotiations with the sickness insurance societies at Gera and Mühlhausen "without consulting the undersigned." Our readers will remember the resignations at these places of the medical officers of the sickness insurance societies on account of the prevailing intolerable conditions of the service. The warning ads were signed by the presidents of the district medical associations and by the president of the "Leipziger Verband." Dr. Schloss represented Mühlhausen. The cable now brings word of his death. It was at first ascribed to the results of a duel which he fought recently with the manager of the sickness insurance society, and the latter was arrested, but it has since been established that his death was due to sepsis after an operation. The state interfered in the matter of the medical attendance of the society, as was chronicled in THE JOURNAL at the time, the physicians practically gaining their point. The warning ad still appears in our German exchanges, but it refers only to Gera at present.

Physicians' Signs in Germany.—The latest decree of the Berlin Medical Court of Honor is directed against supernumerary signs hung out by physicians. It states that a single sign is enough, and any additional ones impinge on unethical advertising methods. The only exception is in case a physician resides in a corner house, when a sign on each of the streets is permissible. Proceedings were instituted against a Dr. Sternberg because he used more than one sign, and in his defense he cited another physician in Berlin who followed the same custom. The Court of Honor drew up a notice to the physician cited, warning him that he must restrict himself to a single sign, and published this notice in a Berlin daily paper. It concluded with the warning that if he did not comply with the specified order he would be summoned officially before the court. The *Allg. Med. Ct.-Ztg.* comments on the lack of tact shown in the publicity given to this notice, and adds that in the confusing multiplicity of street signs in a city a single, modest sign might easily be overlooked, and that it is for the interest of the public to have the physician's sign apparent, and if necessary to have more than one.

Increase of Heart Disease in Young Men in Germany.—The Prussian War Department has recently issued a pamphlet stating that the number of soldiers with heart disease amounted to 1.5 per 1,000 between 1885 and 1886. The proportion has gradually increased until the cases now number 3.1 per 1,000 of all the men in the service. In 1894 the proportion among the young men arriving at the age of military duty was 9.9 per 1,000, but in 1898 it had risen to 17.4 per 1,000. Kraus, Strickler and Landgraf have been studying the subject more closely, and Strickler does not hesitate to declare that the cause of this greater prevalence is the increasing degeneracy and nervousness of the youth of the land. Chronic valvular defects, he adds, exclude the subject from military service, but there are exceptionally functional heart disturbances which may allow military service, preferably in the cavalry or artillery. Special training of military medical officers in the diagnosis of heart diseases, both for treatment and for exclusion of "damaged recruits," will aid in reducing the percentage on the army list. In discussing the causes of the degeneracy of the youth to which he refers, he lays stress on the premature application of boys to arduous work, irregular hours of rest and work, deficient physical development, early use of alcohol and tobacco, sports in excess, especially bicycle riding, rowing and swimming, and dislike of physical exercise among certain classes. The frequency of hysteria and neurasthenia among the youth is also commented on, and the fact that these injurious factors may cause alterations in the heart muscle or merely an undue excitability and irritability. The acute diseases which have a special tendency to involve the vascular system have not increased in intensity or extent during the last twenty years, but the reappearance and prevalence of the grippe has evidently had a large share in the increased morbidity of the heart, either directly or by entailing prolonged weakness of the organ, rendering it less resistant.

LONDON LETTER.

The Declining Birth Rate of Australia.

The declining birth rate of native Americans, which has caused so much concern, is exactly parallel in Australia. Mr. Coghlan, the Australian statistician, has recently written on the subject. He points out that the fall in the birth rate in Australia and New Zealand taken together is such that there are annually fewer births by nearly 20,000 than would have occurred if the rates prevailing as late as ten years ago had been maintained. New South Wales furnishes a striking example. In 1887 there were in this state 112,247 married women under the age of 45; in 1901 there were 149,247, yet the number of children born was about the same in each year. The legitimate birth rate per 10,000 married women under the

age of 45 is 239; in 1891 it was 276. A curious fact is that the decline occurs in every class, among people of every shade of opinion, except among women of Irish birth, who exhibit no decline. But as the proportion of women of Irish birth is fast decreasing that element in maintenance of the birth rate will soon disappear. Large as is the area of the Australian continent Mr. Coghlan thinks it is impossible that its people will ever become truly great under the conditions affecting the increase of population which now exist. Immigration has practically ceased to be an important factor, the maintenance and increase of the population depending on the birth rate alone—a rate seriously diminished and still diminishing.

The Cancer Research Fund.

This organization is being developed on a wide basis, not only in the United Kingdom and the colonies, but also in co-operation with kindred organizations in America and on the Continent. The investigations fall mainly into three groups —experiments, therapeutics and statistics. It was deemed premature to give details of the experiments, but sufficient indications are given to show the value of the study of cancer throughout the animal kingdom and of attempts to facilitate early diagnosis. Although cancer research committees have been active in civilized countries for some time, little is known of its distribution in the lower races of mankind and still less in the lower animals. The necessity for securing farm accommodation where animals may be kept under observation is stated. Under therapeutics only the electric and light treatment is touched on. The beneficial action of the Röntgen rays in rodent ulcer is shown, but no similar results have been obtained in deep-seated growths, although in some cases relief of pain and temporary arrest of growth have been recorded. The lead of the German and other committees in reference to the questions of the increase of cancer contagion, cancer houses and cancer areas has not been followed. Such inquiry is regarded as futile until it can comprise differentiation of the various forms of cancer. An attempt is being made to compile statistics from the best available material—the records of the great hospitals in which the diagnosis has been verified by pathologic examination.

Trypanosomiasis Expedition from the Liverpool School of Tropical Medicine.

The Liverpool School of Tropical Medicine has decided to despatch next month a trypanosomiasis expedition to the Congo Free State. The expedition has been arranged with the co-operation of the government of the Congo Free State. The latter has contributed generously toward the expenses, which will be heavy. The objects of the expedition will be to report on the sanitary conditions of Boma, Leopoldville and other important centers and to make recommendations for their amelioration. Secondly, it will continue the work on trypanosomiasis, human and animal, commenced in the Gambia by Dr. Dutton in 1901, and continued for the past twelve months in the Gambia and Senegal by Dr. Dutton and Dr. Todd, including the occurrence and distribution of trypanosoma in the Congo, the carriers of the parasite and the relation of trypanosoma to sleeping sickness. As the investigations will involve the examination of the blood of wild animals, the Congo Free State is making arrangements for the expedition to participate in drives of big game up country and is facilitating their work in every possible manner. The expedition is under the charge of Dr. J. E. Dutton and consists of himself and Drs. J. L. Todd and C. Christy. Dr. Dutton was a member of the Southern and Northern Nigeria Expedition of the Liverpool School, 1899-1900, the leader of the Gambia expedition, 1901-1902, and of the Senegambia expedition, 1902-1903. Dr. Todd was a member of the latter expedition. Dr. Christy was a member of the commission of the Royal Society appointed to investigate sleeping sickness in Uganda and Central Africa, and has had a large tropical experience. Every facility for travel has been placed at the disposal of the school by Sir Alfred Jones, its chairman and munificent patron, whose interests in West Africa, commercial and philanthropic, are well known.

Correspondence.

Notes from Berlin.

BERLIN, August, 1903.

To the Editor:—Berlin is a sort of surgical heaven—at least for the surgeon. Where else shall one find so many masters teaching at one time as in and around the old Charité, fast being replaced by the new Charité. Professor König, 70 odd years young, operates every morning at 9:30, and what a ripeness of experience and sobriety of judgment are embodied in his work. Every afternoon at 2 Professor von Bergmann, surrounded by a white cloud of assistants, operates in the Langenbeckhaus. Both men are kindly, benignant and deliberate; both cut to the bone at the first stroke, if there is any bone; both use silk sutures and pour on iodoform by the spoonful. In both clinics the patient is usually anesthetized before the class, and often takes the anesthetic badly, and in both a nervous student not infrequently decorated with fresh facial cross-hatchings—how is it the professors rarely show a mark?—is invited into the arena to show how many things he doesn't know about the case in hand.

Beside these there are in surgery Krause, Israels and Sonenburg, and before speaking of other things, the closely allied chairs of pathology and anatomy. To hear Professor Waldeyer, another hale youth of 70 odd, describe the coquetries of the peritoneum at 7:30 a. m. is a treat for gods and men. Where shall one find such simple elegance of diction, such force through clearness, such restraint except when it comes to citing authorities? He resolves the multitudinous drape into its simplest elements and relations, he holds it up and spreads it out before you until it fairly beseeches you to retain and admire its every fold; a master truly. Difficult points are illustrated by specially prepared dissections and every facility which intelligent ingenuity can devise is brought into service for the student. If anatomy is the preface to surgery, pathology is too often the postscript. Not too rarely does the student see the cases he has watched in the clinic demonstrated in the department of Professor Orth, the able successor of Virchow. Here the autopsies begin at 7 a. m., and before the student leaves the building the lesions are demonstrated in detail by assistants. The principal organs, including the brain and long bones, are sectioned and assembled in another room and the microscopic structures are shown in a third. The rapidity and thoroughness with which everything of interest pertaining to each case is demonstrated is marvelous. So much can not be said of the valuable collection in the pathologic museum, which is closed to the public except for two hours on Sunday. It was opened to our party on presentation of cards to Professor Orth. The museum is specially rich in bones, and in complete skeletons of scoliotic and kyphotic individuals, but some of the cases stand in a poor light and the labels are written in a tiny blind chirography, which was in many instances undecipherable. If the labels were printed or written two or three times as large in a catalogue hand the value of the collection to the visitor would be doubled.

The dermatologists, Professors Lassar and Lesser, are great favorites of the students, not only from the importance of their subjects, but because both show many patients and are clear and interesting speakers; both hold daily clinics, the former in the Karl Strasse, the latter in the Charité. Professor Ohlhausen, who operates daily at 8 a. m. at the Frauenklinik in the Artillerie Strasse, impresses one at once as a man of originality, dexterity and force. He is a neat, rapid operator, never missing a stroke, and his methods are thoroughly modern. Professor Hoffa, recently transferred from Würzburg, has a beautifully equipped sanatorium in the Achenbach Strasse, where he does his private work. The public clinic on the other side of the city is also equipped with special apparatus for mobilizing joints and correcting deformities, with workshops and plaster and operating rooms. Tendon grafting is extensively practiced; the routine duration of the bloodless replacement and treatment of dislocated hips is about three months. Professor Joachinsthal also has an interesting clinic for deformities. The sanatorium of the late Dr. Beely is continued under his brother and Drs. Loff and Eckstein, and is especially notable for the variety of corrective apparatus for scoliosis. Dr. Eckstein has been doing high-grade work in the correction of facial and other deformities by the injection of melted paraffin. It was the writer's privilege to see several noses and an umbilical hernia treated by this method; the results were very gratifying. Dr. Eck-

stein believes that by using a paraffin of high melting point (58 C.) the dangers and disadvantages of vaselin and low-melting paraffin are very largely abolished.

His technic is simple and effective, the principal points being that the syringe and base of the needle are covered with rubber tubing, and a little hot water is drawn into the needle to prevent too rapid cooling. In conclusion, I would say that for the physician who understands German and who knows what he wants, the facilities for study in Berlin are exceptionally fine. HENRY LING TAYLOR.

New York address, 125 W. 58th Street.

Dissatisfaction with Medical Legislation.

SHELBYVILLE, IND., Sept. 5, 1903.

To the Editor:—In Chapter II, Article 1, Section 1, of the Principles of Medical Ethics, we find this clear and emphatic statement: "It is inconsistent with the principles of medical science, and it is incompatible with honorable standing in the profession, for physicians to designate their practice as based on an exclusive dogma or a sectarian system of medicine."

My son, after graduating in a regular school of medicine, went before the State Board of Examination and secured a certificate of competency signed by a physio-medical as president and an eclectic as secretary, who also advertised himself as a homeopath and a graduate of Pratt's School of Orificial Surgery.

Now, my son, as well as myself, feel very much humiliated when we are reminded that he is practicing medicine by the courtesy and under the certificate of two gentlemen who, according to the principles of medical ethics, have no *honorable standing* in the medical profession.

For this and various other reasons I have been dissatisfied with some of our recent medical legislation.

W. G. MCFADDEN.

Habits at Mineral Springs.

PARIS, ILL., Sept. 5, 1903.

To the Editor:—I wish to protest through THE JOURNAL against the practice of washing the drinking glasses used by consumptives, syphilitics, etc., in the soda spring at Manitou, Colo. I spoke to several parties while at Manitou, but some claimed that the ingredients of the water disinfected the glasses and others said that the spring was overflowing all the time and purified itself in that way. I have seen the water lowered two or three inches below the brink when there was a rush. I am told the bottling works use a different spring, which I hope is true. I am also told that the same filthy practice is followed at Waukesha, Wis., but I hope it is not so.

W. H. TEN BROECK.

Marriages.

GEORGE R. GILBERT, M.D., Cumberland, Wyo., to Miss Dora C. Roys of Peru, Neb.

THOMAS PALMER WYNN, M.D., to Miss Alberta Robbins, both of Durham, N. C., August 19.

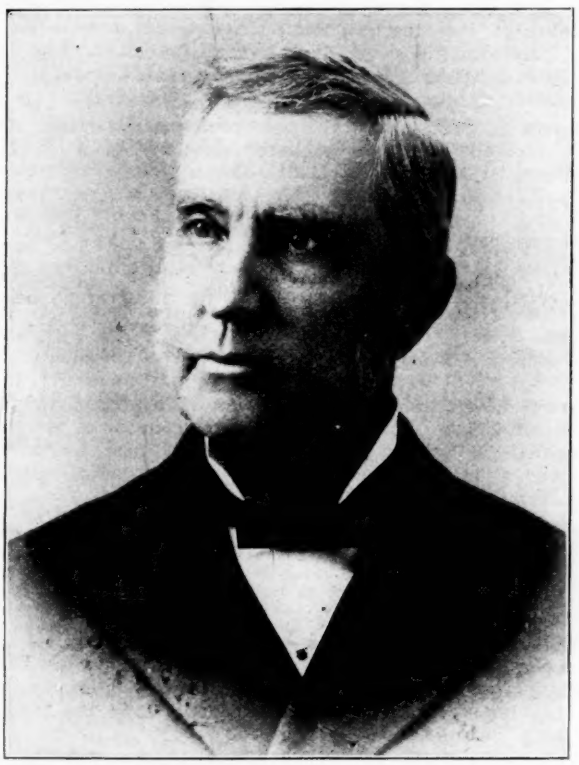
ALEXANDER S. MCCAIG, M.D., Sault Ste. Marie, Ont., to Miss Margaret Shanks of Mattawa, Ont., September 1.

JAMES G. POPE, M.D., Coleman, Texas, to Miss Virginia Joost of Tallahassee, Fla., at Palatine, Texas, August 30.

ALEXANDER MONTAGUE ATHERTON, M.D., of New York City, to Miss Ellen Louise Baker of Providence, R. I., August 25.

Deaths.

James Farquhar Hibberd, M.D., an esteemed member of the American Medical Association, of which he was president in 1894, died September 8 at his home in Richmond, Ind., after a long illness, aged 86 years. He was born at Monrovia, Md., Nov. 4, 1816, and received his academic education at Benjamin Hallowell's School, Alexandria, Va. Then, choosing the medical profession for his career, he read with his cousin Dr. Aaron Wright for one year, attended medical lectures in 1839 and 1840 at Yale University, and on Aug. 14, 1840, began practicing at Salem, Ohio. After seven years he went to New York and there took a two years' course at the College of Physicians and Surgeons, receiving his degree in 1849. He was at once made surgeon of the steamship *Senator*, sailing from New York to San Francisco, a voyage consuming seven and one-half months; thus Dr. Hibberd was made a "Forty-niner." He remained for six years in California practicing medicine and engaging in business with financial success. In 1855 he returned to the East and spent the winter in post-graduate study. In June, 1856, he opened an office at Dayton, Ohio, but four months later removed to Richmond, Ind. During the sessions of 1860 and 1861 he was professor of physiology and general pathology in the Ohio Medical College, Cincinnati. Early in his career he was one of the founders of the Ohio State Medical Society, and was later one of the chief organizers of the Indiana State Medical Society, and of the Wayne County Medical Society. He was a member of the American Medical Association since 1863, serving as its first vice-president in 1865. He was also a member of the Union District Medical Society, the Mississippi Valley Medical Association and Rocky Mountain Medical



JAMES FARQUHAR HIBBERD, M.D.

Association, in all of which societies he held official positions, and of most of which he was at one time president. He was an honorary member of the state medical societies of Ohio and California, and had been a member of the American Public Health Association for more than twenty years. In 1863, after the battle of Stone River, he was for some time in charge of the corps of volunteer surgeons and nurses at Murfreesboro, Tenn. In 1869 he went abroad for a year. During the years 1875 and 1876 he was mayor of Richmond, and in 1881 health officer of Wayne County. He was a member of the Ohio legislature in 1845, 1846 and 1847. In 1885 the University of Indiana conferred on him the degree of LL.D. In 1842 he was married to Nancy D. Higgins, who died four years later, leaving one son, who still survives; in 1856 he was married to Catherine Leeds, who died twelve years later, leaving one son, and three years later he was again married, to Elizabeth M. Laws.

George B. Russel, M.D. Jefferson Medical College, Philadelphia, 1836, who did heroic work in the cholera epidemics of 1836, 1844 and 1845 in Philadelphia; one of the pioneer physicians of Detroit; who influenced Mr. Harper and Nancy Martin to found Harper Hospital, and was the active medical head of that institution for a quarter of a century, died at his home in

Detroit, August 31, aged 87, a week after having been run down by a bicyclist.

Robert A. Patchin, M.D. University of Buffalo (N. Y.) 1869, a member and sometime president of the Polk County Medical Society; a member of the Iowa State Medical Society, Iowa State Association of Railway Surgeons, and International Association of Railway Surgeons, died at his home in Des Moines, Iowa, August 31, from an acute exacerbation of liver disease from which he had suffered for several years, aged 53.

Charles Brooks Brigham, M.D. Harvard University Medical School, Boston, 1870, surgeon during the Franco-German War, and Chevalier of the Legion of Honor for services there rendered; for many years surgeon of the Southern Pacific Railroad, died at his home in San Francisco, from apoplexy, August 23, after an illness of six weeks, aged 58.

Frank N. English, M.D. Chicago Homeopathic Medical College, 1886, of Mendota, committed suicide by severing the jugular vein and large arteries of the neck with a pocket knife, August 31, while under temporary confinement in the Mendota city jail on the charge of causing the death of a patient by a criminal operation. He was about 55 years old.

R. Henderson Graham, M.D. Columbus (Ohio) Medical College, 1879, a member of the Medical Association of the District of Columbia, the American Medical Association, and the American Therapeutic Society, died August 24, at Garfield Hospital, Washington, D. C., from peritonitis, which developed four days after an operation for appendicitis, aged 53.

Joseph A. Stout, M.D. Medical College of Ohio, Cincinnati, 1845, a pioneer of La Salle County, Ill.; one of the original abolitionists, and connected with the so-called "underground railroad," and a member of the American Medical Association, died at his home in Ottawa, August 25, after a long illness from paralysis, aged 85.

Charles Hart Boynton, M.D. Berkshire Medical College, Pittsfield, Mass., 1853, for two years president of the White Mountain Medical Society, and a member of the New Hampshire Medical Society, for two terms a member of the legislature, died at his home in Lisbon, August 16, from cerebral hemorrhage, aged 76.

George H. Cummings, M.D. College of Physicians and Surgeons, New York, 1875, for many years a member of the board of health of Portland, Maine, and also city physician, died suddenly from acute indigestion while on a yachting cruise near Booth Bay, Maine, August 22, aged 53.

Charles C. Lewis, M.D. University of Louisville, 1873, was found dead in his office in Owensboro, Ky., August 30, from angina pectoris, aged 54. He was vice-president of the Kentucky State Medical Society in 1902, and was a member of the Owensboro Board of Education.

William E. Allen, M.D. Albany (N. Y.) Medical College, 1856, an acting assistant surgeon during the Civil War, and health officer of Scranton, Pa., for many years, died from cancer of the bladder after a long illness, August 20, at his home in Scranton, Pa., aged 66.

William L. Northway, M.D. Chicago Homeopathic Medical College, 1879, of Marcellus, N. Y., died at the Hospital of the Good Shepherd, Syracuse, N. Y., from congestion of the brain, August 21, after an illness of two weeks, aged 51.

Edward C. Kearney, M.D. Western Reserve University, Cleveland, 1876, a member of the Allegheny County (Pa.) Medical Society, died at his home in McKeesport, August 31, from heart disease, after an illness of three hours, aged 59.

Newton Sager, M.D. Jefferson Medical College, Philadelphia, 1843, for sixty years a practitioner of Lafayette, Ohio, died at his home in that place, August 22, from cancer of the face, after a long period of suffering, aged 85.

Frederick A. Vigor, M.D. Columbus (Ohio) Medical College, 1879, of New Dover, Ohio, died at the home of his parents in Brandon, Ohio, August 24, from paralysis, after an illness of a year, aged 56.

Zachary Taylor Chrisman, M.D. University of Pennsylvania, Philadelphia, 1873, died at his home in Warwick, Pa., August 23, from Bright's disease, after an illness of about two years, aged 52.

Henry M. Hunter, M.D. College of Physicians and Surgeons, Baltimore, 1886, formerly of Union Springs, Ala., died at his home in San Luis, Potosi, Mexico, August 26, from pneumonia.

Robert D. Hudson, M.D. University of Pennsylvania, Philadelphia, 1879, formerly of Atchison, Kan., was found drowned in the Neosho river, near Emporia, Kan., August 24, aged 57.

Amadon Manley Piersons, M.D. New York Homeopathic Medical College and Hospital, 1868, died at his home in New York City, August 28, after a lingering illness, aged 65.

Joseph D. Casey, M.D. Jefferson Medical College, Philadelphia, 1892, died from paresis at his home in Latrobe, Pa., August 22, after an illness of several months, aged 33.

Lewis B. Ruhlman, M.D. Eclectic Medical Institute, Cincinnati, 1877, of North Lima, Ohio, died suddenly from heart disease in Youngstown, Ohio, August 24, aged 56.

Charles S. Stanley, M.D. Boston University School of Medicine, 1880, died from angina pectoris at his home in Amesbury, Mass., August 19, after a short illness, aged 64.

Thomas Palmer Wynn, M.D. University of Maryland, Baltimore, 1886, of Durham, N. C., died suddenly in New York City, August 23, from ptomain poisoning, aged 42.

Thomas Howard Wilson, M.D. University of Pennsylvania, Philadelphia, 1844, died at his home in Lewisburg, Pa., August 21, after a prolonged illness, aged 82.

Stephen C. Gillette, M.D. Rush Medical College, Chicago, 1852, a member of the Fox River Valley Medical Association, died at his home in Aurora, Ill., September 3.

John Bostwick Lundy, M.D. University of Buffalo (N. Y.), 1851, died at his home in Preston, Ont., from paralysis, August 20, after an illness of one week, aged 77.

Harvey K. Leonard, M.D. Hahnemann Medical College, Philadelphia, 1881, died suddenly from heart disease at his home in Plymouth, Pa., August 23, aged 49.

Dean Seaman, M.D. Jefferson Medical College, Philadelphia, 1879, was found dead in bed at his home in Beaver Dams, N. Y., August 22, from apoplexy, aged 47.

Theodore A. Collett, M.D. University of Michigan, Ann Arbor, 1867, a pioneer physician of Iowa, died at his home in Ida Grove, August 27, from apoplexy.

Jesse C. Hancock, M.D. Miami Medical College, Cincinnati, 1866, the oldest physician in Trimble County, Ky., died at his home in Bedford, August 23.

Edmund Y. Meyer, M.D. Missouri Medical College, St. Louis, 1887, died at the City Hospital, St. Louis, from acute alcoholism, August 30, aged 39.

Barton K. Mynatt, M.D. University of Nashville, 1854, died suddenly at his home in Washington, Tenn., August 29, from heart disease, aged 78.

John S. Wentz, M.D. University of Pennsylvania, Philadelphia, 1855, died at his home in Drifton, Pa., August 28, from paralysis, aged 75.

Thomas A. Ablett, M.D. Cleveland Homeopathic Medical College, 1895, died from diabetes, August 7, at his home in Glennie, Mich., aged 35.

James M. Blair, M.D. Transylvania University, Lexington, Ky., 1849, died at his home in Corsicana, Texas, August 13, aged 86.

Charles Howard Gordon, M.D., 1876, died at his home in Lodi, Cal., August 24, from diabetes, after a long illness, aged 71.

David B. Cotton, M.D. Jefferson Medical College, Philadelphia, 1856, died at his home in Portsmouth, Ohio, August 30, aged 70.

Alexander Montague Atherton, M.D. Johns Hopkins University, Baltimore, 1901, died at Liberty, New York, August 28, aged 28.

George C. Dugas, M.D. Medical College of Georgia, Augusta, 1878, died suddenly at Augusta, Ga., August 28, aged about 50.

Oliver E. Tillson, M.D. Eclectic Medical Institute, Cincinnati, 1862, died at his home in West Alexandria, Ohio, August 28.

David Wolf, M.D. Eclectic Medical Institute, Cincinnati, 1852, died recently at his home in West Alexandria, Ohio.

Benjamin W. Sparks, M.D. New York University, 1859, died at his home in McMinnville, Tenn., August 29, aged 67.

Stephen R. Mason, M.D. Rush Medical College, Chicago, 1851, died at his home in Devall Bluff, Ark., August 20.

Samuel W. Chandler, M.D. University of Michigan, Ann Arbor, 1872, died recently at his home in Saline, Mich.

W. H. Morris, M.D. Missouri Medical College, St. Louis, 1866, died at his home in Sharon, Mo., August 2.

William A. Jones, M.D., died at his home in Sturgis, Ky., August 18, from paralysis, aged 70.

Frank C. **Fraser, M.D.** McGill University, Montreal, 1898, died recently in Montreal.

Joseph E. **Kirkley, M.D.,** died at his home in Beckville, Texas, August 15.

Deaths Abroad.

William **E. Salazar,** College of Physicians and Surgeons, New York, of Havana, Cuba, physician in charge of the American Hospital at Tampico, Mexico, died recently at Tampico from yellow fever, aged 29.

George **William Balfour, M.D.** St. Andrews, 1845; F.R.C.P. Edinburgh, 1861, one of the most celebrated physicians and teachers of the Edinburgh Medical School, died recently, aged 81. His principal work was done on the diseases of the heart. Among his published works were "An Introduction to the Study of Medicine," "Clinical Lectures on Diseases of the Heart," and "The Senile Heart." As a young man he had the courage and originality to promulgate the heresy that the routine treatment of pneumonia by antimony and blood-letting was unnecessary and harmful. He was a member of the Royal Medical, Medico-Chirurgical and Obstetrical societies and consulting and attending physician to many hospitals.

Book Notices.

ORGANIC NERVOUS DISEASES. By M. Allen Starr, M.D., Ph.D., LL.D., Professor of Diseases of the Mind and Nervous System, College of Physicians and Surgeons. Illustrated with 275 Engravings in the Text and 26 Plates in Colors and Monochrome. Cloth. Pp. 751. Price, $6.00 net. New York and Philadelphia: Lea Brothers & Co. 1903.

As the title indicates, this book treats of only the organic nervous diseases. So-called functional diseases, such as epilepsy, hysteria, paralysis agitans, etc., are not considered, nor are trophic disturbances, as acromegaly, and Raynaud's disease. The opening chapter is a discussion of the structure of the nervous system based on the neuron hypothesis. One hundred and thirty-four pages are devoted to the peripheral nerves, and about one-half of these to the various forms of multiple neuritis, which are discussed in a thorough manner and illustrated by a number of the author's cases. Diseases of the spinal cord are given 236 pages. The chapter on the diagnosis and localization of spinal cord diseases demonstrates clearly how careful observation of signs and symptoms will enable a physician, equipped with a knowledge of the anatomy and physiology of the cord, to make an accurate diagnosis by a more logical process than in any other class of diseases. The remaining 320 pages are devoted to diseases of the brain, including an exhaustive chapter on localization and general diagnosis. As stated by the author, his conclusions are largely based on clinical and pathologic data collected by himself in twenty years of neurologic practice. Hence, we are not only presented with old facts in a new and improved form, but offered new observations and suggestions in connection with nearly every subject treated. Illustrative cases from the author's practice are frequently narrated. Where divergent views are held, they are fairly stated. Thus, after stating the present opposing views concerning the nature of the regeneration in severed nerve fibers he suggests that the process may vary, according to the stage of degeneration reached; if advanced, healing must proceed from the proximal stump; if not advanced, it may take place from the neurilemma of the peripheral end. It is an interesting suggestion that many cases of multiple neuritis following infectious diseases, such as typhoid fever and pneumonia, or appearing in the course of tuberculosis, are caused by the alcohol used in the treatment of the primary disease. Another plausible suggestion is that most cases of so-called acute myelitis, particularly those of very sudden onset, really are instances of softening due to vascular disease. The statement that brachial neuritis is fully as frequent as sciatica may not be generally accepted by clinicians. Pathologists will hardly accept the statements that cerebral emboli may be derived from thrombi in the saphenous veins (except in the case of an open foramen ovale, which is not mentioned), that tumors of the pituitary body are usually of the nature of fibroma or myxoma, and that the chalky plaques frequently seen in the arachnoid are beginning psammomata. They will claim that carcinoma of the vertebræ is always secondary, not merely "usually" so. It is stated as a fact that general paralysis begins with changes in the vessels. Bacteriologists will feel strangers to the *Streptococcus aureus,* and will give to the pneumococcus a relatively more important place in the etiology of meningitis than the author has done. The following statements sound peculiar: "Solitary tubercles are occasionally found throughout the cord," and "Retention of urine is liable to set up catarrhal conditions, and finally cystitis." The term "neuron" is used in some places to indicate both cell and axon, in others the cell alone. It is deplorable that the author will aid to perpetuate the ambiguous term "dorsal" instead of "thoracic" region of the spine and cord. The term "acute progressive paralysis" for Landry's paralysis, though in itself a good one, must be condemned, as "progressive paralysis" is now commonly used to designate general paralysis of the insane. However, a few defects must be expected in a book which is so strikingly one man's work. The personality of the author is felt on every page, though other authorities are freely quoted and references given in foot notes. The work deserves special commendation for the pains taken in pointing out underlying pathologic conditions and the logical necessity of their producing certain definite symptoms. The subject of treatment is by no means neglected. Thus, eight pages are devoted to the treatment of tabes, and seven to that of apoplexy. After pointing out that it is not possible to arrive at a positive diagnosis between a clot and softening in more than one-half of the cases he adds: "When it is impossible to make an accurate diagnosis between hemorrhage and thrombosis or embolism it is not safe to employ active medication directed to either condition lest the damage to the brain may be increased." And speaking of the use of potassium iodid to absorb a clot, he says: "Those who believe it will accomplish any result may continue to use it." The illustrations are abundant and uniformly excellent. Some are original, though most of them have been borrowed. Those in the recent work of Schmaus and Sacki on the pathology of the spinal cord have been heavily drawn on and well reproduced.

DISEASE OF THE PANCREAS. Its Cause and Nature. By Eugene L. Opie, M.D., Associate in Pathology in the Johns Hopkins University. Cloth. Pp. 359. Price, $3.00. Philadelphia and London: J. B. Lippincott Company. 1903.

This book is a good example of what all will agree is the most desirable kind of medical literature in this country in which medical book publishers issue almost exclusively books that are fairly certain to have a respectable sale, such as textbooks of all kinds, large and small, compends, etc. Of course we can not expect medical publishers to become so philanthropic that they will publish many medical books at financial loss, simply because they are good books, but it is most desirable that the facilities for the publication of monographs and books dealing exhaustively with limited subjects be encouraged. Perhaps the best way to persuade the publishers of the desirability of this innovation is, first, to offer for publication really first-class material, and, secondly, when books like Opie's Diseases of Pancreas are published to help increase the sales. In this particular instance the qualities of the book, the amount of important, original work of direct interest to the physician and surgeon, that is set forth in a simple yet delightful style, are bound to secure for the book many readers. The contents are of interest alike to the physician and surgeon. To quote from the preface: "The recognition of pancreatic lesions, their causes and their consequences, is of great importance, not only to the physician, but notably to the surgeon who opens the abdomen. For illustration, disseminated fat necrosis indicates grave disease of the gland; acute pancreatitis is a not infrequent consequence of cholelithiasis; while chronic pancreatitis, which accompanies the same condition, is frequently mistaken for malignant growth. To the student of internal medicine few conditions

present greater difficulties of diagnosis than do the various forms of pancreatic disease; but with increasing knowledge of their etiology, their nature, and their relation to other diseases, means for their recognition are closer to hand." Of the contents may be mentioned chapters on the anatomy of the pancreas, the anomalies, the microscopic anatomy, including the islands of Langerhans; varieties of acute pancreatitis, the etiologic relation of gallstones to acute hemorrhagic pancreatitis, fat necrosis, chronic interstitial pancreatitis, its varieties and etiology; diabetes mellitus and its relation to lesions of the pancreas; bronzed diabetes; the symptoms and treatment of pancreatic disease. The illustrations are helpful and tasteful; there are interesting reproductions of the original drawings of Santonini, showing both ducts of the pancreas and the papillæ in the duodenum; the principal lesions are well illustrated. Opie's book is a most important addition to the literature of the pancreas and its diseases, and should be found in the library of every progressive physician and surgeon. The amount and quality of new, original work here set forth has advanced greatly our knowledge of the pancreas and its diseases, and the book will always be a landmark in the history of the pancreas.

Miscellany.

Discussion of Appendicitis—A Correction.—Dr. Miles F. Porter calls attention to the fact that remarks were erroneously credited to him in the discussion on the paper of Dr. Gibbons in THE JOURNAL, August 29, page 546. The sentences that are credited to Dr. Porter were made by Dr. Ochsner in reply to Dr. Porter's question.

Tongue Reaction to Mercury in Latent Syphilis.—Baroch adds his testimony to that of Herxheimer and Krause in regard to the diagnostic value of the reaction that follows the first dose of mercury, if it is a large one. The two latter observed a reaction in the cutaneous lesions, but Baroch has noticed it on the tongue. The reaction is apparent in fifteen to twenty hours and disappears after twenty-four to forty-eight. It is sometimes accompanied by a temperature reaction. In five cases he found the opaline patches on the tongue, the reaction to the mercury, in less than twenty hours after inunction of about 10 gm. of gray ointment.—*Allg. Med. Ct.-Ztg.*, lxxii, p. 133.

State Boards of Registration.

Oregon Report.—Dr. Byron E. Miller, secretary of the Board of Medical Examiners of the State of Oregon, reports the examination held at Portland, July 7 to 9, 1903, as follows: Number of subjects examined in, 15; total questions, 100; percentage required to pass, 75 per cent.; written examination; total number examined, 24; passed, 20; failed, 4.

PASSED.

Schl. of Pract.	College.	Year Grad.	Per Cent.
H.	Boston University School of Medicine	1903	84.66
H.	Boston University School of Medicine	1903	86.30
R.	University Medical College, New York	1898	83.33
R.	University of Michigan	1898	82.53
R.	University of Iowa	1897	78.40
R.	Cooper Medical College, San Francisco	1903	87.06
R.	College of Phys. and Surgs., San Francisco	1903	84.13
R.	College of Phys. and Surgeons, Chicago	1903	79.60
R.	College of Phys. and Surgeons, Chicago	1903	83.92
R.	College of Phys. and Surgeons, Baltimore	1895	80.13
R.	Rush Medical College	1897	77.53
R.	Rush Medical College	1901	83.86
R.	Rush Medical College	1902	84.20
R.	Rush Medical College	1902	84.86
R.	Rush Medical College	1897	78.60
R.	Jefferson Medical College	1878	79.06
R.	Louisville Medical College	1876	75
R.	Louisville Medical College	1903	84.13
R.	Grand Rapids Medical College	1902	75
R.	Kansas Medical College, Topeka	1892	82.93

FAILED.

H.	Pulte Medical College	1886	73.33
R.	Omaha Medical College	1882	69.66
R.	Vanderbilt University, Nashville	1880	67.06
R.	Undergraduate	....	68.53

Queries and Minor Notes.

ANONYMOUS COMMUNICATIONS will not be noticed. Queries for this column must be accompanied by the writer's name and address, but the request of the writer not to publish his name will be faithfully observed.

THE CAUSE OF CANCER.

CATHLAMET, WASH., Aug. 17, 1903.

To the Editor:—Has the parasitic theory as to the origin of cancer been fully established? Has Roswell Park, or any other investigator, clearly demonstrated that any one parasite is constantly present? What are the latest ideas of our best pathologists on this subject? Kindly answer through THE JOURNAL.

C. W. B.

ANS.—The parasitic theory has not been established. No one has demonstrated the constant presence in cancer of undoubted parasites, and no one parasite has been shown to be associated always with any special form of cancer. The "best pathologists," we believe, are skeptical as to the correctness of the claims put forward now and again by the advocates of the parasitic theory. The problem is unsolved, and we must be content for the present to regard the cause of cancer as wholly unknown.

Association News.

List of new members for the month of August, 1903.

ALABAMA.

Goldthwaite, Henry, Mobile.
Grace, Frank G., Hillman.
McKinnon, C. B., Geneva.

CALIFORNIA.

Witherbee, Orville O., Los Angeles.
Keenan, Alex S., San Francisco.
Beattie, D. A., Santa Clara.
Tyler, John A., Anaheim.
Maher, Thos. D., San Francisco.
Wilde, Kate, Los Angeles.
Johnston, Herbert A., Anaheim.
Fernandez, M. L., San Francisco.
Lilley, John Francis, Oakland.
McNary, W. T., San Jose.

COLORADO.

Reynolds, M. P., Colorado Springs.
McGraw, Henry R., Denver.

GEORGIA.

Fowler, A. L., Atlanta.

IDAHO.

Avery, Oliver H., Payette.
Kleinman, Erwin W., Shoshone.

ILLINOIS.

Colbert, John W., Jacksonville.
Goldstine, Mark, Chicago.
Bates, A. D., Camp Point.
McKee, Edw. N., Roseville.
Phillips, Henry A., Chicago.
O'Neill, A. A., Chicago.
Parker, Howard, Edgar.
Arp, August H., Moline.
Zimmermann, Ernest, Quincy.
Anderson, Margaret, Quincy.
Zeitner, S. L., Chicago.
Weichelt, A., Barrington.
Sachs, T. B., Chicago.

INDIANA.

Bowers, Whitefield, Michigan City.
Long, H. H., Kingsbury.
Smadel, Joseph W., Vincennes.
Thixton, E. D., Sullivan.
Hunter, John R., Huntington.
Briggs, C. F., Sullivan.
Ledbetter, J. N., Michigan City.
Mountain, Jos. R., Connersville.
Stockhardt, Philip E., Elwood.

IOWA.

Dahms, Oscar A., Davenport.
Weber, J. Siewert, Davenport.
Doern, W. G., Fort Madison.
McKinney, O. B., George.
Huff, John W., Onawa.

KANSAS.

Crumbine, S. J., Dodge City.
Esterly, Daniel E., Topeka.

KENTUCKY.

Arnold, J. H., Versailles.
Landman, Louis H., Covington.
Meredith, W. E., Scottsville.
Rodman, J. J., Owensboro.
Eager, B. F., Hopkinsville.
El Kourie, H. A., Clifty.

LOUISIANA.

Bechet, Paul E., New Orleans.
Godfrey, J. B., Olla.

MAINE.

Pennell, Walter J., Auburn.
Davis, Philip W., Portland.
Johnson, Wellington, Augusta.
Hart, Willis F., Camden.
Alden, Eben, Rockland.
Little, Albion H., Portland.
Mitchell, Jr., Alfred, Portland.

MASSACHUSETTS.

Cross, Wm. P., South Boston.
Prescott, W. H., Boston.
Easton, Elwood T., Boston.

MICHIGAN.

Harkness, R. Bruce, Houghton.
Lamley, George H., Riga.
Elliott, William, Escanaba.
Campbell, Samuel E., Winona.
Bell, John N., Detroit.
Turner, J. G., Houghton.
Moore, Joseph J., Farmington.
Farnsworth, Harry B., Detroit.
Jackson, William S., Houghton.
Kirby, T. W., Sault Ste. Marie.
Banks, Harold W., Escanaba.
Laing, A. L., Rapid River.
Wheeler, Aaron R., St. Louis.
Bower, H. L., Greenville.
Burley, Jacob H., Almont.
Rice, William G., Topinabee.
Tucker, A. R., Mohawk.
Laing, John B., Otisville.
Wright, George, Detroit.
LeRoy, Simeon, Grand Rapids.
McColgan, James, Grass Lake.
Harrison, Hugh, Detroit.
Castell, Daniel G., Holly.
Cooper, Wilfred Leslie, Detroit.
Bessey, W. E., Grand Rapids.
Wheeler, Chas. Salter, Flushing.
Bailey, John R., Mackinac Island.
Ferguson, Robert Y., Pontiac.

MINNESOTA.

Coulter, Charles F., Wadena.

MISSISSIPPI.

Banks, Wade S., Abbeyville.
Baker, D. E., Newtonville.

MISSOURI.

Nifong, Frank G., St. Louis.
Dove, J. D. F., Camden.

NEBRASKA.

McLeod, J. W., Lincoln.
Parry, Warren, Fairbury.
Johnson, William H., Wahoo.
Haggard, J. R., Lincoln.
Herron, William F., Pender.
Hawes, Samuel E., Fairbury.
Petty, Chas. O., Beaver Crossing.

Holyoke, R. A., Lincoln.
Sapp, Clinton E., South Omaha.
Smith, Nina R., Pender.

NEW JERSEY.

Nash, A. R., Frenchtown.
Strasser, August A., Arlington.

NEW YORK.

Chapin, Alva L., Niagara Falls.
Lomax, Howard E., Albany.
Young, F. R., Lake Placid.
Gillette, Herbert F., Cuba.

NORTH CAROLINA.

Wilkins, Samuel A., Dallas.
Highsmith, Seavy, Hope Mills.

OHIO.

Alfred, C. M., Lancaster.
Kistler, Geo. B., Newcomerstown.
Marting, William F., Ironton.
Chase, William S., Akron.

OKLAHOMA TERRITORY.

McIlvain, Jas. R., Oklahoma City.
Moorman, Lewis J., Jet.

OREGON.

King, Alfred, Portland.

PENNSYLVANIA.

Dickson, Joseph Z., Pittsburg.
Huyette, M. Luther, Shillington.
Brown, J. C., Smethport.

SOUTH DAKOTA.

Steuart, Charles E., Wessington Springs.

TENNESSEE.

Litterer, Jr., William, Nashville.
Grigg, S. C., Murfreesboro.
McGehee, John L., Memphis.
Hughes, M. L., Clarksville.
Penn, George W., Humboldt.
Baldwin, W. H., Memphis.
Culbreath, L. W., Stanton.

TEXAS.

Fenley, W. M., Menardville.
Randall, Edward, Galveston.
Moore, James A., Marshall.
Harlan, William Jay, Bartlett.

VERMONT.

Wiltse, M. J., Burlington.

VIRGINIA.

Carr, George H., Portsmouth.
Hodges, J. Allison, Richmond.

WISCONSIN.

Watson, Fred V., Antigo.
Baker, George R., Tomahawk.
Henbest, G. M., Madison.
Chambers, Harry P., Florence.
Nadean, A. T., Marinette.

PHILIPPINE ISLANDS.

Warwick, C. A., Manila.

REPORT ON THE SCIENTIFIC EXHIBIT

Of the American Medical Association, at New Orleans, May 5-8, 1903.

By Frank B. Wynn, A.M., M.D., Chairman.

(Concluded from page 623.)

MEDICAL DEPARTMENT, UNIVERSITY OF INDIANAPOLIS: FRANK B. WYNN AND JOHN S. WRIGHT.

Research Group.

No. 318. Banana Shreds of Fibrovascular Tissue, passed in stool and supposed to be parasites. This was reported to the Indianapolis Medical Society in 1901 by F. B. Wynn, and is the third such submitted to him for identification.

No. 319. Segments of Cabbage, probably served as slaw, passed in the stool, and supposed to be tapeworm. The resemblance to segments of the tapeworm was striking, but the microscope easily revealed the vegetable nature of the product.

No. 320. Ribbons and Shreds of Paper Passed in Stool.—Some portions resembling the segments of tapeworm; others were like the mucous casts occurring in mucous colitis. The woody fiber of many papers makes them very indigestible. They may be so intimately adherent to such things as meat, caramel candy, etc., as to escape notice, and in the stool might easily give rise to error in diagnosis.

No. 321. Fusiform Masses of Parenchyma Cells of the Lemon, passed in the stool and mistaken for parasites. The resemblance to the fluke is striking.

The foregoing specimens led to an experimental study by ten students of the university designed to show the following:

(*a*) The histology of common fruits and vegetables used as articles of diet, including apple, peach, pineapple, pear, banana, gooseberry, currant, rhubarb, grape, tomato, string bean, navy bean, onion, sugar corn, pop corn, celery, Irish and sweet potato, peanut, cabbage, kale and cucumber.

(*b*) Effect of the ordinary methods of preparing food for table use in causing disintegration. In an assigned article the student made fresh mounts from the food as found on the table at the restaurant.

(*c*) Effect of digestive processes on these foodstuffs and the recognition of partially altered food remnants which might be mistaken for parasites. Each student ate freely of an assigned article at different times, afterward searching the stools for remanants of the food taken.

These studies demonstrated very clearly that the fibrovascular tissue, especially of pineapple, rhubarb and celery, often resists the action both of cooking and the digestive juices, appearing as slender white threads in the stools, which might easily be mistaken for worms.

Nos. 322-376. Drawings and Gross Specimens Illustrative of the Foregoing.

Miscellaneous Group.

Nos. 377-382. Pulmonary Tuberculosis, Different Types.
Nos. 383-388. Liver Series.
Nos. 389-394. Kidney Series.
Nos. 395-405. Embryologic Series.
Nos. 406-411. Miscellaneous Specimens.

These were all Kaiserling preparations mounted in glycerin jelly by students of the university. The mounting was unique and artistic. The containers were Petri dishes set in heavy oak boards, which are convenient for class demonstration, non-breakable and may be stacked in drawers away from the light—a factor of importance in preserving the colors.

RUSH MEDICAL COLLEGE: E. R. LE COUNT.

Experimental Group.

Nos. 412-415. Series of Preparations Illustrating Experimental Fat Necrosis, as obtained by injecting either commercial pancreatins or extracts of fresh hog pancreas into the abdominal cavity of dogs and cats. The specimens showed the results respectively twenty-five hours, forty-eight hours, five days and nine days after injection. (See article by Wells, *Journal Medical Research,* 1903, iv, 70.)

No. 416. Gangrenous Pancreatitis with Disseminated Fat Necrosis.—This specimen was shown for purposes of comparison with the experimental lesions. The foci of fat necrosis were visible over the mesentery and omentum. At the necropsy the head of the pancreas was found to be of normal firmness, with distinct lobular markings on the cut surface and gray with reddish mottling foci. Necrosis of the entire body of the pancreas had taken place.

No. 417. Subacute Hemorrhagic Pancreatitis, with Fat Necrosis.—Specimen from a man who died of lobar pneumonia. Dark red areas, irregular in outline, were seen externally in the fresh specimen; also yellow areas. Histologic examination showed an acute inflammation in addition to extensive necrosis and hemorrhage.

Group of Heart Specimens.

Nos. 418-423. Series of Cardiac Anomalies.—These included asymmetrical pulmonary segments; fenestrated foramen ovale; perforate ventricular septum, and a rare congenital mal-development in which there was communication between the aorta and left ventricle under the base of the anterior aortic valve. Hektoen could find no mention of a similar case in literature.

Nos. 424-435. Series of Endocardial Heart Lesions.—Three of these were of acute aortic endocarditis; three of acute mitral or parietal endocarditis, and six were chronic valvular deformities resulting from fibrosis or calcareous infiltration, causing stenosis or insufficiency.

Group of Miscellaneous Specimens.

No. 436. Skeleton of a Short-Limbed Dwarf.—From a man 45 years of age. There was a fibroid thyroid, containing no demonstrable thyroidin(?). The cranial vault possesses 172 wormian bones. The skeleton has some features of osteogenesis imperfecta and some of chondrodystrophia fetalis. The absence of a clinical record and the disuse incident to deformity, with resulting alterations of the bones, are factors which make classification difficult.

No. 437. Acute Yellow Atrophy.—The hepatic tissue illustrating this rare disease was from a woman 35 years of age. She had jaundice in August, and when admitted to the hospital the following November the icterus was very deep and she had been semistuperous for several days. Death occurred twenty-four hours after admission. Only partial examination was permitted. In the specimen large reddish areas were noted which contained very little liver tissue; greenish districts still showed some lobular markings.

Nos. 438-439. Rupture of Spleen.—In one of these, by the passing of a wagon wheel over the body, the organ was torn in two pieces. Operation in six hours was followed in a month by complete recovery. The other was a crushing injury from an elevator. Operation in eight hours, with complete recovery. In one there was subsequent glandular enlargement.

Nos. 440-452. Miscellaneous Gross Specimens.

The instructiveness of this fine collection was greatly enhanced by very complete accompanying data—clinical and pathologic—plainly written on white paper.

JOHNS HOPKINS UNIVERSITY: HARRY T. MARSHALL AND T. S. CULLEN.

Internal Medicine Group.

These were designed to illuminate more particularly amebic dysentery, a topic prominently considered in the Section on Practice of Medicine.

Nos. 453-456. Amebic Dysentery.—These specimens showed very typically the intestinal lesions.

Nos. 457-460. Amebic Liver Abscess.

Nos. 461-464. Intestinal Lesions of Typhoid.

Nos. 465-468. Tuberculous Ulcers of the Intestine.—The typhoid and tuberculous lesions of the intestines were exhibited for purposes of differentiation from dysenteric lesions.

Gynecologic Group.

These were limited to uterine myomata and represented the cullings of material obtained at the Johns Hopkins Hospital. The specimens and drawings were used in illuminating a paper read by T. S. Cullen before the Section on Obstetrics and Diseases of Women.

No. 469. Myoma Showing Sarcomatous Nodules in Middle.

No. 470. Specimen Showing Transition of Myomatous Fibers into Sarcoma.

No. 471. Diffuse Adenomyoma, occupying inner layers of uterus and forming a complete zone around the uterine cavity. Histologic examination showed that the gland elements were derived entirely from the mucosa.

No. 472. Early Adenocarcinoma of Body Associated with Myoma.—The growth was so recent that the mucosa was not in the least thickened.

Nos. 473-478. Cervical and Submucous Myomata.

Nos. 479-496. Myomata Showing Various Degenrative Changes.

Nos. 497-568. Drawings Made from Sections of the Foregoing Tumors.

These two very complete groups of specimens were contributed in conformity with the wishes of the committee, aiming thus to illuminate subjects of prominence considered on the section programs.

MEDICAL DEPARTMENT, WASHINGTON UNIVERSITY: WILLARD BARTLETT.

Experimental Group.

Nos. 569-577. Experimental Intestinal Anastomosis.—These specimens were obtained from dogs, and are used for teaching purposes

in the university. They were beautifully prepared and showed well the following:

(*a*) End-to-end anastomosis, Connell suture, 30 hours. Illustrating too long a diaphragm.

(*b*) End-to-end anastomosis, Halstead peritoneal suture, 5 days. Too long a diaphragm.

(*c*) End-to-end anastomosis, Connell suture, 16 days. Illustrating the small diaphragm which should be present at this time.

(*d*) End-to-end anastomosis, Connell suture, 40 days. Almost complete disappearance of diaphragm, and re-establishment of normal lumen.

(*e*) Lateral anastomosis, Halstead peritoneal suture, 21 days. Showing the growing together of new opening.

(*f*) Lateral anastomosis, Halstead peritoneal suture, four Connell through-and-through sutures added 21 days. Opening prevented from growing together by last-named sutures.

(*g*) Lateral anastomosis, Halstead peritoneal sutures, 28 days. Showing new opening more grown together than in (*e*).

(*h*) Lateral anastomosis, two rows of continuous Lembert sutures, one through peritoneum and other through all coats of bowel, 49 days.

(*i*) Lateral anastomosis, Halstead peritoneal suture, 87 days. Illustrating a new opening so grown together that there is distension of the proximal loop in consequence.

Miscellaneous Group.

Nos. 579-585. Miscellaneous Gross Specimens.

ST. LOUIS UNIVERSITY: WILLARD BARTLETT.

Nos. 578-585. Miscellaneous Gross Specimens.

These were all prepared by the Kaiserling method and illustrated various pathologic points well. Metastatic sarcoma was beautifully shown in the lung, liver, kidney and spleen.

COLLEGE OF PHYSICIANS AND SURGEONS, CHICAGO: W. T. ECKLEY.

Nos. 596 621. Anatomic Specimens.

Nos. 622-633. Gross Pathologic Specimens.

The first set was beautifully prepared, semi-moist specimens used by the exhibitor in teaching in the college. Accompanying these was a batch of theses by students, containing a large number of original drawings, testifying forcefully to the excellent work done in the institution in this department. This is the third successive year in which this institution has contributed ably toward the Scientific Exhibit of the Association.

ST. PETER STATE HOSPITAL, MINNESOTA: H. D. VALIN.

Nos. 634-648. Casts of Pathologic Brains.—Illustrating the following pathologic conditions: Porencephaly, glioma, amniotic adhesion band, destruction of cortex, localized internal hydrocephalus and hematoma duræ. (Made in the laboratories of the institution.)

Nos. 649-658. Surface Anomalies of Convolutions and Sulci.

Nos. 659-664. Anatomic Casts of Brain and Cord.

Nos. 665-779. Album of Photomicrographs.—The first sixteen were of the brain cortex of the cat and rat, showing, by way of comparison, sections before and after the various stages of fatigue. The remainder were of various pathologic conditions of the central nervous system, including acute delirium; first, second and last stages of degeneration in cells; capillary hemorrhages into the brain cortex; asphyxia in epilepsy; multiple embolism (luetic); hemiatrophy and hemisoftening, diseased and healthy sides; atrophy of auditory cortical center compared with opposite side; senile and mania-dementia, with degeneration of cortex; sclerosis of comma tract in general paresis; tumor of pituitary; glioma; tumor of spinal cord, and many others.

Nos. 780-815. Lantern Slides of the Foregoing.

The photomicrographs were artistic in showing the utmost detail of histologic structure and were made doubly interesting by the very complete and methodical, clinical and pathologic data which accompanied them.

COOK COUNTY HOSPITAL, CHICAGO: F. G. HARRIS.

The following collection consisted of choice Kaiserling preparations. Some were of unusual pathologic as well as clinical interest. It is creditable to the institution to have made such a contribution.

No. 816. Ileum Showing Attached Hookworms.—These specimens of *Uncinaria americana* were from a man aged 52 years who had lived in Panama for twenty-five years. For a year and a half previous to death he suffered from severe progressive anemia. The eggs and larvæ were found in the stools. Blood examination gave the following: Reds, 846,000; whites, 4,500; hemoglobin, 12 per cent.; eosinophiles, 13 per cent.; no nucleated reds. (Reported by Copps, THE JOURNAL A. M. A., January, 1903.)

No. 817. Charcot Knee Joint.—The specimen showed beautifully the destruction of the ligaments, cartilages and synovial membranes; also the erosion of the bones and periarticular fibrosis. The patient was a man who contracted syphilis fifteen years previously. For two years he noted a progressive and painless enlargement of the joint. Excessive mobility interfered with locomotion. Other symptoms and signs of tabes dorsalis present.

No. 818. Puerperal Endometritis-Infection with Bacillus Acrogenes Capsulatus.—Specimen obtained from a woman 24 years of age, confined three days before death. Gas containing cavities were to be seen throughout the uterus.

No. 819. Myeloma of Femur.—Circumference of knee, 28 inches. Tumor transparent to *x*-rays. The patient, a woman of 30, received an injury to the knee seven years ago. Six months later progressive enlargement of the knee began and was accompanied by some pain and limitation of motion. No metastases.

No. 820. Congenital Cystic Kidney.

No. 821. Bilateral Cystic Kidneys.

No. 822. Unresolved Pneumonia.

No. 823. Aneurism of Thoracic Aorta.

No. 824. Aneurism of Abdominal Aorta.

No. 825. False Aneurism of Abdominal Aorta.

No. 826. Serofibrinous Pericarditis.

No. 827. Adhesive Pericarditis.

No. 828. Atrophic Cirrhosis of Liver.

No. 829. Metastatic Carcinoma Lungs.

No. 830. Metastatic Carcinoma Liver.

No. 831. Splenic Cyst.

No. 832. Interstitial Carcinoma Stomach.

The following series of specimens was entirely in illustration of the gross lesions of malaria.

U. S. ARMY MEDICAL MUSEUM, WASHINGTON, D. C.: COL. CALVIN DE WITT.

No. 833. Spleen and Kidney in Chronic Malarial Poisoning.

No. 834. Darkly Congested Kidney, Pernicious Malarial Fever.—Estivo-autumnal parasite found in spleen. H. E. N., aged 23, white. Admitted March 2, 1900, to Post Hospital, Cebu, Philippine Islands; April 15 was outdoors and exposed to sun; fainted, and blood appeared in urine and feces. On the 18th and 19th there was much restlessness and prostration; unconsciousness; intense yellowishness of skin and conjunctiva; persistent vomiting; involuntary urination and defecation; heart action weak; constantly under strychnia stimulation. Repeated peripheral examination of blood failed to show malarial parasite. Urine blackish and contained vast numbers of partly disintegrated blood corpuscles and blood casts; little albumin; no epithelium or casts; color much improved during last twenty hours of life. Died 19th. Necropsy three hours after death. Lungs apparently normal; liver a muddy color; gall bladder contained a thick, tarry bile; small intestine much stained with bile and contained twelve lumbricoid worms; kidneys darkly congested; spleen much enlarged, dark and congested; scrapings from latter showed microscopically the estivo-autumnal parasites, containing large pigment granules in active motion.

Nos. 835-836. Spleen and Kidney in Pernicious Malarial Fever.—From the Philippines.

No. 837. Spleen in Chronic Malaria.—From the Philippines.

This special series was solicited by the Committee. It makes the second time that the Army Medical Museum has contributed liberally, under the direction of Col. DeWitt, to the Scientific Exhibit of the Association.

The Indiana State Medical Association was the first organization to institute the scientific exhibit as a feature of society work, and to its efforts may be attributed the introduction of the exhibit into the American Medical Association. The collection was entirely of dry specimens.

INDIANA STATE MEDICAL ASSOCIATION: FRANK B. WYNN.

No. 838. Skull Trephined by Baron Larrey, surgeon of Napoleon I. During the retreat from Moscow in 1812 the man was cut down by a Russian cossack and left on the field twenty-four hours. He recovered after trephining, and continued in the service a year. Died in 1873. Just above the squamous portion of the temporal is a quarter-sized opening in the calvarium, where the button was removed, and extending two inches from it the evidence of a saber cut. He suffered slight difficulty in speech. (Fletcher.)

No. 839. Enormous Distension of Colon from Retained Feces.—This specimen was obtained by Drs. Gleb and Jones, Groton, S. D., from G. K., who went for one year and three days without a bowel movement. For the first six months he ate three hearty meals a day, doing harvest work. Later he could only do light work. At some points the bowels measured 19¼ inches.

Nos. 840-879. Collection of Vesical Calculi.—This fine series of stones was obtained by operations, during a residence of eleven years in Persia, by J. G. Wishard. Some of the cases were operated on under the most trying circumstances, in filthy and crowded quarters, and in some instances in stables.

No. 880. Ten Renal Calculi.—Product of one nephrectomy; weighing 5 ounces. The patient was a man, 39 years of age. Several years previously he had been injured by the caving in of a pit. Had hematuria for a week, but no further renal symptoms. For a year and a half previous to the operation by F. R. Charlton he had been treated for stomach trouble, persistent vomiting being the most conspicuous symptom. At the time of operation there was tenderness over the back and pus in the urine. Nephrotomy was first performed, a pint and a half of pus and the stones were removed; ten days later the kidney was removed. Recovery.

No. 881. Epidermal Cast of Foot.—Hemorrhagic smallpox. (Brayton.)

Nos. 882-902. Miscellaneous Specimens.—Including enteroliths, hair balls, foreign bodies removed from the larynx by operation, etc.

GEORGE E. SHAMBAUGH, CHICAGO (PRIVATE COLLECTION).

Nos. 903-906. Series of Wood's Metal Casts of Ear.—1. Two casts of labyrinth mounted on stiff cardboard, with drawings of anterior and posterior surfaces. 2. Metal cast of ear showing: (*a*) Meatus auditorius externus; (*b*) cellulæ mastoidæ; (*c*) meatus acousticus internus; (*d*) the osseus labyrinth. 3. Cast same as No. 2 and showing, in addition, the aquaductus vestibuli and the canaliculus cochleæ, with its accessory canal for the exit of the large vein from the cochlea.

Nos. 907-918. Series of Celloiding Casts of Labyrinth, mounted in cells and made from a preparation in which the blood vessels had been previously injected. 1. Complete cast of labyrinth, showing a perfect injection of the capillaries as well as the arteries and veins. Two drawings of the preparation in colors. 2. Cast of the cochlea, showing the arterial tree alone. Drawing of same in colors. 3. Drawings in colors to show following: (*a*) Basal coil of cochlea of embroyos 11 cm. long; (*b*) venous tree of cochlea; (*c*) basal coil of cochlea of fetus, full term; (*d*) cross section of cochlea; (*e*) detail of piece from basal coil of cochlea; (*f*) semicircular canal with ampulla; (*g*) detail drawing of section of the semicircular canal.

R. W. GILLMAN, DETROIT (PRIVATE COLLECTION).

Nos. 943-337. Series of Temporal Bones.—Arranged in order to show the varying distance of the lateral sinus from the spina sup. meatus. In No. 1 the distance was 21.0 mm. In each succeeding specimen the sinus was shown nearer the meatus, and in No. 17 they were only 6.0 mm. apart.

EDWARD EVANS, LA CROSSE, WIS. (PRIVATE COLLECTION).

Nos. 938-947. Products of Twelve Cholecystotomies.
Nos. 948-953. Appendiceal Specimens.

The stones in each cholecystotomy case were beautifully mounted on a board. The essential points of interest to the appendiceal specimens were the foreign bodies found in the appendix. In one case there was an apple seed; in another two live round worms were found in an abscess surrounding the perforated appendix.

The following exhibit was a beautiful series of casts of the bladder and prostate gland, designed to show the different types of hypertrophy of the latter, with the view of illustrating the particular form of surgical treatment indicated in each case.

BRANSFORD LEWIS, ST. LOUIS (PRIVATE COLLECTION).

No. 954. Bilateral Enlargement, with obstruction from pedunculated intravesical growth. Suprapubic operation advisable.
No. 955. Moderate Enlargement of Lateral Lobes; thick prostatic bar; deep bas fond; marked curvature of urethra. Favorable for perineal prostatectomy.
No. 956. Enlargement of Both Lateral Lobes; pedunculated median intravesical tumor from posterior commissure. Suitable for suprapubic removal.
No. 957. Pedunculated Median Intravesical Growth from posterior commissure. Favorable for suprapubic removal.
No. 958. Excessive Enlargement of Lateral and Median Lobes; direct pressure on both ureter openings producing dilatation of ureters and renal pelves. Favorable for combined suprapubic and perineal removal.
No. 959. Lateral Lobes, Enlarged; especially right; high prostatic bar, with small nodule on right; deep bas fond. Favorable for Bottini or perineal prostatectomy.
No. 960. Marked Enlargement of Both Lateral Lobes, and globular intravesical tumor from posterior commissure. Removal of tumor and both lobes required; best accomplished through perineal and possibly suprapubic combined routes. Bottini inappropriate.
No. 961. Moderate Enlargement of Lateral Lobes.—Pyramidal median projection capable of ball and socket effect. Suitable for suprapubic removal.
No. 962. Multiple Adenomata projecting into prostatic urethra. Favorable for perineal removal. Bottini inappropriate and inadequate.

HERMAN TUHOLSKE, ST. LOUIS (PRIVATE COLLECTION).

No. 963. Placenta Attached to Liver.

This remarkable specimen is the only one of its kind reported. The nearly full term fetus was removed from the abdomen by operation, but the woman died a few hours later from secondary hemorrhage.

H. F. HARRIS, ATLANTA (PRIVATE COLLECTION).

Nos. 964-966. Malarial Plasmodium.—Preparations stained by the modified Romanowsky process.
No. 967. Ameba from case of amebic dysentery in man.
No. 968. Ameba from a case of dysentery experimentally induced in a dog.

CLAUDE A. SMITH, ATLANTA, GA. (PRIVATE COLLECTION).

No. 969. Gross Specimens of Uncinaria americana.
Nos. 970-972. Microscopic Mounts, showing both the hookworm and ova.

MIHRAN K. KASSABIAN, PHILADELPHIA (PRIVATE COLLECTION).

Nos. 973-1012. Collection of Skiagraphs.

These skiagraphs were excellent. The more noteworthy among them were: (*a*) Pleurisy with effusion. (*b*) Vesical calculus. (*c*) Congenital dislocation of both hips (reduced by Lorenz).

W. C. FUCHS, CHICAGO (PRIVATE COLLECTION).

Nos. 1013-1113. Radiographs.—Rare in this collection were the following: (*a*) Four-month fetus differentiated from tumor; (*b*) pus sac recurrent appendicitis; (*c*) floating kidney; (*d*) pericarditis; (*e*) gallstones; (*f*) cyst of the brain.

Medical Organization.

MEDICAL ORGANIZATION METHODS AND BENEFITS.

J. N. M'CORMACK.

(*Continued from page 623.*)

THE REMEDY.

Through the universal county society system it is proposed that there should be built up in each community, gradually and with the self-sacrificing labor incident to all important undertakings, a permanent organization, which will give artificially, as it were, the same opportunity for acquaintance, comradeship and improvement which comes naturally in those more favored vocations, of which the legal profession is a conspicuous example. To do this will require a union of all the forces at the command of the profession—its leaders, existing societies and schools. To secure this union, physicians must be convinced and students taught that no one was ever permanently benefited by traducing his competitors, or by the practice of any of the "black arts," and that the time has come for them to decide whether they will go on in the old, discredited courses, "learning nothing and forgetting nothing," as Macauley said of the Stuarts, wasting valuable time and bringing continued reproach on themselves and their guild, in endless, senseless, profitless bickerings, as in the past, or, instructed by what is going on around them in other callings, and in other sections in their own calling, get together for their own and the public good. There will be dissenters and pessimists, and the work may be difficult at the outset in many places, but each county accomplishing it and conducting its society in the broad, kind and mutually helpful spirit to be inculcated, will be an object lesson for its neighbors, good examples being just as infectious as bad ones. In such counties it will be an honor to be a physician, a pleasure to practice medicine, and the public will be benefited even more than the profession.

OTHER OBJECTS.

It must be borne in mind always that the organization and resulting pleasant relations indicated, important and essential as they are, are only means to far higher and more useful ends. Assuming that all this has been accomplished, or is well under way, the real work of the society should then be undertaken. To do this to the fullest advantage, study should be given to the many ways in which it may be made useful to the profession and people within its jurisdiction. Most of these are indicated in the by-laws briefly, but may require elaboration. In a measure, and in a very modest way at first, each society should be made a post-graduate school for the county. All who can do so should be urged to attend such schools in the medical centers from time to time for the purpose of getting out new editions of themselves, as it were, and to impart the information thus acquired, so far as possible, to their less fortunate colleagues who can not do so. Programs should include not only the usual papers and discussions, but also demonstrations, clinical cases, pathologic specimens, exhibits of the latest and best journals and books, and occasionally an address by some prominent invited guest. Younger members who can qualify themselves to do so should be encouraged to take up special research work. All of the proceedings should be so shaped and conducted as to encourage home study, both in the review of the elementary branches and as to the application of the latest and best methods in practice. A line of study after the plan of some of the university extension courses is greatly needed for the use of county societies and is likely to be developed soon. Public health questions should also have frequent place on the program. Aside from the prevention or restriction of epidemic and the ordinary communicable diseases, the complex problems incident to our rapidly-increasing population in this country, both rural and urban, must be met and worked out by the medical profession. Our rivers, which must be the source of water supply for future generations, are rapidly being converted into open sewers, poisoned, as are the soil and air, from ignorance more than greed on the part of municipalities, corporations and individuals. An educated public sentiment, which must originate and be directed by the medical profession, is needed, to demand and enforce preventive and remedial legislation in regard to these and other public dangers, unless we are to repeat the unfortunate experience of the older civilizations, whose people were repeatedly decimated and finally dwarfed as results of such neglect. The society should always be in touch with the county and municipal boards of health of its jurisdiction, and should lead in and co-operate with every proper effort to improve sanitary conditions. With these ends in view it should have a voice or be consulted in regard to new regulations and ordinances, and in the selection of the members of such boards.

MATERIAL AND BUSINESS INTERESTS.

Physicians are proverbially poor business men. As has been shown, this has resulted largely from the failure of even the best medical schools to give any instruction on the subject to start with, supplemented by an almost universal lack of organization, and false ideas as to a conflict of interest between local men. There has been a singular delicacy of sentiment, too, about the propriety of discussing this subject either in medical societies or before the public. All this must be changed. The time has come for everybody to understand that under modern conditions a physician who is a failure financially can not keep himself qualified and equipped for safe practice, and that in consequence low prices and rate-cutting are fruitful sources of danger to the public. Some voluntary understanding as to charges in each community is proper and necessary, but in order to prevent a possible abuse of the great power which a universal organization of the profession will give it is wisely written into the fundamental law of the entire system that no schedule of fees or agreement as to prices shall be adopted by any society. A medical trust would be objectionable and un-American as any other kind of trust. Beside, experience has shown that even the best-intentioned attempts to enforce such agreements by expulsion or other penalties have always resulted in further dissensions, with public sentiment and advantage on the side of the less scrupulous. Moral suasion, backed by an organized profession and an educated public sentiment, is the only remedy here as in all similar matters. For these reasons the by-laws also provide that "each county society shall set apart at least one meeting in each year for a discussion of the business interests of the profession of the county," and for efforts for a proper instruction of the public on the subject. At this meeting some leading members who have been most successful along just and ethical lines should open the discussion, which should be so directed as to indicate the best and most practical methods for the guidance of all. It should include the frequency and best methods of making collections; the expediency of a common collector for a number of physicians, on a salary and with a separate office, who can devote his entire time to their service; of the advantages of an office at the residence, or the economy of a joint office with different hours, or a common waiting room with individual consulting rooms, with the same office attendant and telephone; of a hospital owned or directed in whole or in part by the profession; of the advisability of taking advantage of modern pharmaceutic conveniences and dispensing their own drugs, and all similar questions, so far as they are adapted to the conditions and needs of that society.

In all of these matters the interests of the public should be fully and fairly considered, and at such meetings leading laymen might often be invited to take part in the discussions with profit to all. In fact, the mutual interests and obligations of the profession and public in everything should be iterated and reiterated as a means of education for both. The best and highest sources of information are now open and reasonably accessible to all medical men in this country, and every community is entitled to, and should have, competent physicians, and the best and most approved treatment in their afflictions. Most people who are in moderate circumstances, and all in emergency sickness, must receive this at the hands of their home physicians or not at all. Through systematic organization alone is it possible to furnish the incentives and opportunities requisite for such ends, and organization is incomplete until this has been done. This instruction, whether at home or in medical centers, with the incident equipment essential to its utilization in practice, is expensive and the public should be educated to its interest and duty in such a support of the profession as will enable its members to acquire them without depriving their families of the means of subsistence.

SOCIAL PROVISIONS.

The social features of the society should also receive careful attention, probably at the hands of a permanent committee with talent for such matters. Frequent and inexpensive lunches should be recognized as a legitimate and tasteful method of increasing the attendance and interest, and of promoting kind personal relations. In this respect the society should represent a gentlemen's club in its informal but dignified and respectful intercourse. It should be borne in mind by all concerned that members will take the time and trouble to attend only so long as the meetings are made pleasant and instructive. Little fear need be entertained on these points, however, if the councilors, and through them the profession at large, can once be made to understand the character, spirit and advantage of the work, so that each officer and member may be induced to do his full part.

QUALIFICATIONS OF COUNCILORS.

On account of the important powers and duties imposed on the council as a body, and still more on its individual members for several years to come at least, the office of councilor will be the most responsible within the gift of the state associations. Indeed, the inauguration and success of the entire work is so dependent on what he does that no one should accept the office who will not freely give the time and labor necessary to the efficient discharge of the duties. It is necessary that every one who would qualify himself for the office should make a special study of the constitution and by-laws which his state association has adopted, and of those which it has recommended for adoption by county societies. He should make himself familiar with the history of medicine, and especially with that of his own state and country. He should also inform himself as to the medical and health laws of the state. When possible, a joint meeting of the council and state board of medical examiners and the state board of health should be held early in the work in order that there may be that harmony of views and concert of action between those working for common ends essential to the best results. Representatives from the faculties of the various medical schools should be invited to such meetings for consultation as to the feasibility of establishing practical courses on ethics and business methods, as well as of having all advanced students advised as to the advantages of society membership and organization.

DUTIES OF COUNCILORS.

Possessed of the accurate knowledge and breadth of views which will qualify him for a discussion of the necessity, practicability and objects of the reorganization which the profession has undertaken, and being supplied with a card index register, or other reliable list containing the names of the physicians of each county in his district, the councilor is ready for active work. Selecting the county, a personal letter should be written to each physician notifying him of the place and hour agreed on for a meeting to consider the advisability of such an organization of the profession of his county as will improve all of its interests, scientific, social and material. The letter should be explicit, cordial in tone and should conclude by urging him to attend, and to notify and bring his professional neighbors and friends with him. A copy of the county constitution and by-laws should always be enclosed. Unless it is known that all of the physicians at the county seat are on unusually friendly terms the meeting should always be called at the courthouse, a hotel or other public place, and some conveniently located physician should be requested to arrange for the room and see that it is in order.

On his arrival the councilor will do well to call on each physician at the county seat, interest him in the meeting, and have him call up his friends out in the country, remind them of the meeting and urge them to come in. He is likely to meet with much discouragement and to hear many doleful complaints in this part of his work, but it may be encouraging for him to know that the best and most permanent results have often been secured in counties where conflicting interests and personal dissensions at first appeared so long established and irreconcilable that all were reluctant to attend. The importance of a full attendance at the first meeting, especially of those at the county seat, or those between whom dissensions or coolness exist, can hardly be overestimated. Such of these as fail to hear the address, to have an opportunity to take

part in the discussion which follows, and to come into fellowship then will usually prove much more difficult to deal with afterward.

(To be continued.)

Crawford County (Ind.) Medical Society.

This society has been organized with Dr. Frederick R. Gobbel, English, president; Dr. Charles D. Luckett, English, vice-president, and Dr. G. H. Abell, secretary and treasurer.

Durham County (N. C.) Medical Society.

Dr. Hubert A. Royster, Raleigh, councilor for the Fifth District, met with the physicians of the county at Durham, August 28, and organized a county medical society in affiliation with the state and National organizations, with an initial membership of 11. Dr. A. G. Carr, Durham, was elected president; Dr. Norman M. Johnson, Durham, vice-president, and Dr. George H. Ross, East Durham, secretary and treasurer.

McLennan County (Texas) Medical Society.

Physicians of McLennan County met at Waco, August 25, and organized a county medical society, adopting the constitution and by-laws recommended by the American Medical Association and electing the following officers: Dr. James C. J. King, Waco, president; Dr. Ralph E. Conger, China Spring, vice-president; Dr. Jesse J. Dean, Waco, secretary; Dr. J. D. Lovelace, Spegleville, treasurer, and Drs. Oliver I. Halbert, Garland B. Foscue and C. Enrique Smith, all of Waco, censors.

South Dakota Fourth District Medical Society.

A large number of physicians met at Huron, August 27, and organized this society, which comprises the counties of Beadle, Buffalo, Hyde, Hand, Hughes, Gerauld, Spink, Sanborn, Stanley and a part of Kingsbury. The following officers were elected: Dr. William H. Lane, Miller, president; Dr. Clark B. Alford, Huron, vice-president; Dr. Charles J. Lavery, Pierre, secretary; Dr. John L. Foxton, Huron, treasurer, and Drs. Lorme W. Robinson, Pierre, Isaac M. Burnside, Highmore, and E. A. Taylor, Huron, censors.

Jasper-Morton County (Texas) Medical Society.

Dr. Benjamin F. Calhoun, Beaumont, councilor for the Tenth (southeast) District, met with the physicians of Jasper and Morton counties at Jasper, August 30, and organized a medical society with the following officers: Dr. H. R. Hancock, president; Dr. Jefferson D. Yates, Kirbyville, vice-president; Dr. Thomas E. Stone, Jasper, secretary and treasurer; Drs. B. F. Yates, Jefferson D. Yates, Kirbyville, and G. T. Sutton, censors; Dr. Thomas E. Stone, Jasper, delegate to the state medical association, and Dr. Benjamin F. Bean, Kirbyville, alternate.

Green Lake County (Wis.) Medical Society.

The physicians of Green Lake County met at Dartford, August 20, organized a county medical society and adopted the constitution recommended by the American Medical Association for county societies. The following officers were elected: President, Dr. Charles E. Thayer, Markesan; vice-president, Dr. Arthur L. Travis, Princeton; secretary and treasurer, Dr. B. E. Scott, Berlin; delegate to state society, Dr. John S. Walbridge, Berlin, and censors, Drs. John S. Walbridge, Berlin, George E. Baldwin, Dartford, and Gertrude C. Crumb, Berlin.

Guilford County (N. C.) Medical Society.

On August 22 a meeting of physicians of the county was held in Greensboro to perfect reorganization in accordance with the constitution of the state society, at which the following officers were elected: Dr. Millard F. Fox, Guilford College, president; Drs. James A. Turner, High Point, and William J. Richardson, Greensboro, vice-presidents; Dr. Thomas R. Little, Greensboro, secretary and treasurer, and Drs. William J. Richardson, Thomas R. Little and Albert R. Wilson, all of Greensboro, committee on constitution and by-laws to report at the September meeting.

Orleans Parish (La.) Medical Society.

This society is in a flourishing condition, as evidenced by the large attendance at the meetings held in the heat of summer and by the very valuable papers contributed recently. The society now has 218 members, the largest number in its history. This gratifying state of affairs is to be attributed to the interest freshly awakened, in the first place, by the meeting of the American Medical Association held in New Orleans last May, and secondly, by the determination of the society to affiliate with the Louisville State Medical Society, as well as by the new regulations of the state society requiring each member to belong to his local society.

Societies.

COMING MEETINGS.

Medical Society of the Missouri Valley, Omaha, Sept. 14-15.
Medical Society of Virginia, Roanoke, Sept. 15-17.
Medical Society of the State of Pennsylvania, York, Sept. 22-24.
American Association of Obstetricians and Gynecologists, Chicago, Sept. 22-24.
Colorado State Medical Society, Denver, Oct. 6-8.
Medical Association of the District of Columbia, Washington, Oct. 6.
Idaho State Medical Society, Boise, Oct. 8-9.
Mississippi Valley Medical Association, Memphis, Tenn., Oct. 7-9.
Vermont State Medical Society, Bellows Falls, Oct. 15-16.
New York State Medical Association, New York City, Oct. 19-22.

Montana State Medical Association.—This association has filed its articles of incorporation, in accord with the resolution passed at the annual meeting in Butte, July 8, authorizing the special committee so to do.

Floyd County (Ga.) Medical Society.—At the first meeting after the organization of this society, held at Rome, August 25, Dr. Robert M. Harbin was elected president; Dr. Levi P. Hammond, vice-president, and Dr. William J. Shaw, secretary, all of Rome.

Boise (Idaho) Medical Association.—The organization of this association was completed, August 17, by the election of the following officers: Dr. George Collister, president; Dr. Warren D. Springer, vice-president; Dr. James L. Stewart, secretary and treasurer, and Drs. Lewis C. Bowers, Lewis, and Ed. E. Maxey, censors.

Pacific Coast Association of Railway Surgeons.—At a meeting in San Francisco, August 24, seventy-five railway surgeons organized this association, with the following officers: President, Dr. Walter B. Coffey, Southern Pacific, San Francisco; vice-presidents, Drs. Norman H. Morrison, Santa Fe, Los Angeles, Charles N. Ellinwood, San Francisco, and Kenneth A. McKenzie, Oregon Railway and Navigation Company, Portland; treasurer, Dr. Frank K. Ainsworth, Southern Pacific, San Francisco, and secretary, Dr. James P. Dunn, Southern Pacific, Oakland.

Cumberland Valley Medical Society.—At a meeting in Chambersburg, August 21, physicians of Washington County, Md., and of Cumberland, Adams and Franklin counties, Pa., met and appointed a committee consisting of Drs. John J. Coffman, Scotland; Robert W. Ramsay and P. Brough, Montgomery, Chambersburg; A. Barr Snively, Waynesboro; W. H. Brosius, Mont Alto, and David F. Unger, Mercersburg, to report on the feasibility of forming this society, at a meeting held in Mont Alto September 8.

BRITISH MEDICAL ASSOCIATION.

Seventy-first Annual Meeting, held at Swansea, Wales, July 28 to 31, 1903.

(By Our Special Representative.)

(Concluded from page 626.)

Leprosy: Its Etiology, Histology and Treatment.

MR. JONATHAN HUTCHINSON, London, advanced the following propositions:

That an overwhelming body of evidence is opposed to the belief that leprosy spreads by an ordinary mode of contagion (the breath, touch, clothes, bites of insects, wounds, etc.).

That hereditary transmission, if it ever occurs, is a rare event.

That commensal communication—that is, by eating food contaminated by a leper's hands—occurs occasionally, but is by no means frequent.

That in all countries where leprosy is not common a great majority of the cases are *de novo*, in the sense that there has been neither inheritance nor any exposure to risk of contagion.

That the facts as regard leprosy point to its being caused by some article of food.

That there is no other article of food which can be reasonably suspected excepting fish.

That the very excessive prevalence of leprosy in certain fishing districts is a fact strongly in favor of the fish hypothesis, and that its excessive incidence in Roman Catholic communities supports the same conclusion.

Various supposed objections to the fish hypothesis were answered, and it was urged that the amount of circumstantial evidence now accumulated is sufficient not only to justify but to demand that measures based on it should be adopted.

The Treatment of Advanced Tuberculous Disease of the Knee-Joint.

MR. G. A. WRIGHT and MR. W. F. HASLAM contributed a joint paper.

By advanced is implied the stage where operative intervention of some kind is imperative. The paper was based on an analysis of a large number of replies received from hospital surgeons to a series of questions sent to them by the authors. The points considered were:

1. The indications for operation in a case of tuberculous knee. 2. The nature of the operation selected. 3. If erasion is performed—(a) incision; (b) treatment of patella, crucial ligaments, and superficial and deep bone lesions. 4. If excision—(a) treatment of patella; (b) question of fixation of ends of bones. 5. Arrest of hemorrhage. 6. Drainage. 7. Dressings. 8. Splints. 9. Tendency to flexion after operation. 10. As to result in shortening in excision and erasion. 11. The influence of age in deciding as to which operation should be performed. 12. The seat of origin of the disease.

The Pathology of General Paralysis.

DR. W. FORD ROBERTSON opened the discussion on this subject. He supported the hypothesis recently enunciated by Drs. M'Rae and Jeffrey and himself, on the ground of bacteriologic and other evidence, that general paralysis is the result of chronic toxic infection from the respiratory and alimentary tracts, permitted by general and local impairment of the defenses against bacteria, and dependent on the excessive development of various bacterial forms, but especially on the abundant growth of a diphtheroid bacillus which gives the disease its special paralytic character. The widely-accepted view that general paralysis is dependent on a syphilitic toxemia will be controverted. It was maintained that syphilis only predisposes to the disease by impairing the general and local defensive mechanisms, and that it is merely one of many known agents that contribute to this weakening of the natural immunity. The possibility of the occurrence of a bacterial invasion of certain tissues as an essential part of the morbid process was also considered and some evidence bearing on the question brought forward.

Alcohol in Its Relation to Mental Diseases.

DR. THEO. R. HYSLOP said: The rôle of alcohol in the physical economy of the healthy body is more evil than good, and its use is abuse; in the unhealthy body its use may be compared to a loan—at heavy interest—to cope with immediate necessity, and to enable the bodily processes to recuperate.

In the degenerative processes due to chronic alcoholism the nuclear proliferation and overgrowth of the connective tissue cells appear to be closely related to the continued dilation of the vessels and the consequent increase of exudation of lymph to the tissues. In ordinary inflammation the exudate contains a relatively smaller quantity of proteids than does the blood plasma—owing possibly to the selective activity of the endothelial cells. In this case the extravasated leucocytes tend to undergo rapid destruction and dissolution.

When alcohol is conveyed to the plasma the metabolism of the leucocytes is retarded—owing to deprivation of the tissues of some oxygen; and there is retention and proliferation of the exuded material.

An explanation of the mnemonic defects and perversions due to alcohol is suggested; and it is contended that alcohol *per se* does not cause general paralysis.

The Pathology of Splenic Anemia.

DR. H. D. ROLLESTON, in discussing this subject, stated that the term splenic anemia is still often used in a vague sense to describe the clinical association of anemia with splenic enlargement not manifestly due to any definite cause. The relation between anemia and splenic enlargement is a wide subject, and it is therefore proposed to limit this discussion to chronic splenic anemia (primary splenomegaly of Brühl), recently described in greater clinical detail by Osler. The clinical characters of this condition are fairly definite, namely:

1. Splenic enlargement which can not be connected with any recognized cause.
2. Absence of any enlargement of the lymphatic glands.
3. Anemia of a type midway between secondary anemia and chlorosis.
4. Leucopenia, or at most no leucocytosis.
5. An extremely prolonged course lasting years; and
6. A tendency to hemorrhages, especially gastrointestinal, from time to time.

The main question for discussion is whether this clinical entity is a pathologic entity or whether it is merely a combination of symptoms which, under certain circumstances, may be due to a number of different conditions. No doubt some cases regarded clinically as chronic splenic anemia turn out after death to be due to syphilis, thrombosis of the portal vein, cirrhosis, etc., but in other cases there is no morbid lesion except a chronic change in the spleen, which may reasonably be explained as the effect of long-continued toxemic or infective processes. Further investigations—especially blood reactions—are required to show whether these two groups of cases can be separated clinically. Differential blood counts usually show a relative increase in the mononuclear and decrease in the polymorphonuclear leucocytes, but there is nothing pathognomonic. The spleen may show: (1) Increased fibrosis, with atrophy of the malpighian bodies either alone, or (2) in addition to varying degrees of endothelial proliferation; when the latter is very extreme it has been described as a primary malignant growth (Gaucher, Ramond and Picou). Are these appearances different stages in the same process, or are they manifestations of different causes? and to what extent are they pathognomonic of splenic anemia? In some cases hepatic cirrhosis supervenes as a terminal stage (Banti's disease), in other cases slight and latent fibrosis of old date is found in the liver. Is the splenomegaly due to processes originating in the intestinal tract, and so an allied condition to cirrhosis of the liver? Bacteriologic examination of the spleen has not yet given any help. Further knowledge as to the state of the bone marrow, and of the factors inhibiting its hemopoietic activity in splenic anemia, is wanted. In conclusion, although chronic splenic anemia may be regarded as a clinical entity its causation is unknown, and at present, therefore, there is not sufficient evidence to consider it a definite pathologic entity.

Treatment of Convergent Squint.

MR. GUSTAVUS HARTRIDGE said the treatment of convergent concomitant strabismus in a scientific manner can only be approached by the consideration of the various factors which help to produce the disorder, and by a careful examination of every case, so that the value and importance of each factor may be ascertained.

Concomitant convergent strabismus is a condition affecting both eyes—it is a binocular defect, and is the result of excessive innervation of the internal recti muscles excited by the associated act of accommodation. The factors which may assist in the production of squint are:

1. Hypermetropia.
2. Imperfect development of the fusion faculty.
3. Defective visual acuity in one eye.

4. The anatomic position of rest of the eyes.

These various factors do not play the same part in every case; they may not all be present, hence a careful and systematic examination of each case is essential. The objects to be obtained by treatment are:

1. The correction of the deformity.
2. Establishment of binocular vision for all distance.

The treatment may be divided into: Optical, orthoptic, operative.

The importance of an exact optical correction is beyond all question, and in many cases results in a complete cure. Orthoptic exercises are of great value in many cases, but must be commenced early. They consist of:

1. Covering up the fixing eye for a certain time daily.
2. Practice with a stereoscope.
3. Bar reading.

The optical and orthoptic treatment must be faithfully carried out for twelve months before any operative treatment can be entertained. When an operation has been decided on we have to decide: What operation shall be undertaken? We have at our disposal four operations:

1. Simple tenotomy of one or both eyes.
2. Simple advancement.
3. Tenotomy with advance of the opponent muscle.
4. Stretching of one of the muscles.

The chief points on which he invited discussion were:

1. When is an operation necessary or justifiable?
2. What operation gives the best results?

Operations on the Temporal Bone for Otitis Media Purulenta.

DR. ARTHUR HARTMANN, Berlin, spoke on this subject.

1. *Acute Inflammation.*—As a rule, in opening the mastoid in acute inflammation the antrum should be opened in order to have free communication with the tympanic cavity.

Only in cases of abscess in the mastoid, if the internal wall of the abscess seems to be healthy and if there is no swelling in the meatus and on the upper part of the membrane, we need not open the antrum.

In order to effect a rapid and lasting cure the entrance to the cavity must be made very wide. All the bone over the diseased part and the external part of the posterior wall of the meatus must be removed. After this the soft integuments fill the cavity.

2. *Chronic Inflammation.*—The operation on the temporal bone in chronic purulent inflammation of the middle ear when it can not be cured by other treatment, including that by the tympanic tube and by excision of the ossicles, consists in the radical operation.

The radical operation must be so performed that all affected parts of the cavities are rendered accessible and visible.

For this purpose:

1. All the bone outwards of the affected parts must be removed.
2. The external meatus must be much enlarged.

This enlargement can be effected:

(a) If the destructions are not very great by means of Korner's flap.

(b) In cases of large destructions, as in cholesteatoma, by the Y cut of Siebenmann, combined with the excision of a part of the cartilage of the concha.

For cases of labyrinthine suppuration the labyrinth can be opened without injuring the facial nerve either from the semicircular canals or from the promontorium according to the seat of the disease.

The Pathology and Treatment of Chorea.

In descanting on this subject Dr. D. B. Lees spoke of the chorea of childhood alone. He said chorea is not merely a disorder of muscular movement. There is clinical evidence of an abnormal state of the rolandic cortex, as also of other parts of the brain. He alluded to the implication of speech, of memory, and of the mental and moral faculties. The morbid state sometimes in chorea is intense, often very chronic, yet not destructive, and usually ends in complete recovery. This suggests that the cause is probably a toxemia.

He described the pathologic and histologic results in fatal cases. There is clinical evidence of a morbid blood state in chorea. Any of the manifestations of rheumatism may accompany it. Strength of the evidence of the connection between the two can only be appreciated by keeping all these manifestations in mind. Chorea is often the first rheumatic symptom. Bacteriologic evidence is as yet scanty, but suggestive.

He concludes that chorea is, in the great majority of cases, essentially a rheumatic symptom. Other causes are possible, but rheumatism should be suspected in every case.

Antirheumatic treatment, if sufficiently vigorous, produces very satisfactory improvement in acute chorea. Large and frequent doses of salicylate are required. Other measures should be employed. Insufficient doses are usually given because of the tradition that salicylate is a cardiac depressant. This action is really due to acute rheumatic dilation of the heart, and not to the remedy. The chronic cases are naturally less influenced by the drug because motor centers may remain abnormally excitable after the action of micro-organisms has ceased, yet here also the salicylate is of service, if used freely. Other remedies should be used, such as arsenic, antipyrin, ergot, etc.

The Upper Respiratory Tract as a Source of Systemic Infection.

DR. DEHAVILLAND HALL brings forward cases to show that typhoid fever may start in the larynx. He points to the initiatory symptoms of measles, influenza and whooping cough as clearly indicating that the virus of these diseases enters the system through the upper respiratory tract. Diphtheria is essentially a local disease at its commencement, and the specific bacilli may enter at the nose, nasopharynx, pharynx (the usual situation) or larynx; the secondary symptoms are due to the absorption of toxic materials secreted by the bacilli during their growth. Cases are brought forward to show that the virus of scarlet fever may enter the system through a wound of the nasal mucous membrane. He is of opinion that there is much to be said in favor of the view that tonsillitis is a primary infective disease of the lacunæ, and that rheumatic fever is a secondary disease arising from the absorption of microbes or their products into the system. He emphasizes the importance of the careful treatment of even slight tonsillar affections in view of the danger of systemic infection. Septicemia, pyemia and erysipelas are shown to be diseases which certainly enter the system in many cases through the upper respiratory tract. Occurrence of primary tuberculosis of the nose, pharynx and larynx, and the recognition of latent tuberculosis of the tonsils, both faucial and pharyngeal, point to the possibility of the tubercle bacillus entering the system via the upper respiratory tract. Cases of syphilitic infection through primary sores in nose, nasopharynx, pharynx and larynx are mentioned.

DR. JOBSON HORNE, in a paper on the same subject, deals mainly with three points: 1. That the upper respiratory tract is more frequently than is generally stated a site of primary infection with systemic diseases other than those commonly assigned to it, and that a more routine examination of the region should be made in the clinical investigation of diseases of obscure origin. 2. That the region is not only a source of, but is also a factor in, modifying or arresting infection. Lastly the surgical treatment of such diseases is considered with reference to the foregoing.

By way of illustrating these points the following diseases are more especially discussed: Infective endocarditis, tuberculosis, lymphadenoma and lymphosarcoma.

As to infective endocarditis, evidence is adduced to show that the primary infection at times is in the larynx.

In regard to tuberculosis, the relative virulence of moist and dry infection is considered. The part played by the upper respiratory tract in tuberculosis is regarded as three-fold: (a) Direct inoculation—e. g., primary tuberculosis of nose, fauces, postnasal space, soft palate, pharynx, partoid gland, tongue, larynx. (b) Indirect infection, the lymphoid tissue

acting as a channel to convey infection—e. g., primary tuberculosis of the ear, of the cervical lymphatic glands, descending infection of lungs via cervical lymphatic system. (c) Bactericidal action, the lymphoid tissue modifying or preventing infection.

As to lymphadenoma, the relationship of the disease to tuberculosis is considered, and positive evidence is adduced to prove that the disease may be regarded as parasitic, and that infection at times occurs through the upper respiratory tract. Cases in which this evidence is complete were cited.

Relative to lymphosarcoma, pathologic evidence is offered in favor of the thoracic disease, histologically described as "lymphosarcoma," being due to infection through ulceration of the larynx.

The surgical treatment of tuberculosis of the larynx and lymphadenoma was considered with reference to the foregoing remarks.

Officers.

The president-elect of the association is William Collier, M.A., M.D., F.R.C.P., Oxford, and Oxford, England, was selected as the place for holding the next annual meeting.

CANADIAN MEDICAL ASSOCIATION.

Thirty-sixth Annual Meeting, held at London, Ont., Aug. 25 to 28, 1903.

(*Concluded from page 627.*)

President's Address.

DR. W. H. MOOREHOUSE, London, Ont., delivered the president's address on the evening of the first day. He urged the need of a uniform standard of medical education throughout the dominion, and he thought that this would be brought about as soon as the political horizon became cleared.

THE PATENT MEDICINE EVIL.

President Moorehouse spoke in vigorous terms of the patent medicine craze. The evils were many and readily understood. Certainly not the least was the alcohol habit, which, under the insidious insinuating form of a harmless medicine, was stalking in our midst like a midnight pestilence. Continuing, he said:

> Can not something be done to shield the public from this great evil? Shall we, the members of this enlightened profession, who see this monster, with its many-sided evils, having its bold, indecent advertisements in the press, pervading even the religious journals, clothing these nostrums with an air of respectability; we, who daily meet in our rounds melancholy examples of this terrible delusion, I say, shall we not raise our voices in loud protest against it?

Resolutions.

Resolutions were adopted, one asking the British Medical Association to meet in Toronto in 1905, another pledging the endeavors of the members to bring about a system of municipal sanatoria for the treatment of tuberculosis.

The Cardiac Complications of Influenza.

DR. E. G. WOOD, Nashville, Tenn., said that only a want of recognition of the cardiac dangers can account for the common practice of administering such large and frequently repeated doses of the coal-tar drugs in influenza. Months after an attack of la grippe a man still complains of unusual weakness; he is short-winded and sweats on slight exertion. Physical examination may be negative, yet he is suffering from cardiac weakness due either to functional or muscular disease of the organ.

The cardiac complications may be divided into organic and functional.

ORGANIC.

1. *Pericarditis* is either primary, when it complicates influenza without other organs being affected, or secondary, where it occurs in association with pneumonia or pleurisy, the latter being more frequent.

In grippal pericarditis purulent effusion is comparatively frequent and myocarditis is commonly associated with it. Pericarditis may be present without symptoms.

2. *Endocarditis.*—This occurs more frequently than usually supposed. It is rarely primary, and in the great majority of cases it is secondary to pneumonia. The infective agents are the pneumococcus, streptococcus, staphylococcus and the bacillus of Pfeiffer. Endocarditis may be (1) simple, (2) ulcerative. The simple may present the usual symptoms or may be unrecognized. Ulcerative endocarditis may occur during the attack, but appears more frequently in the convalescing period.

3. *Myocardial Changes.*—The bacillus of influenza elaborates a poison which causes degenerative changes in the myocardium, and when convalescence begins and the patient gets up the heart muscle is unable, under the increased strain, to perform its functions, and palpitation, dyspnea, weakness and collapse are complained of. These symptoms call for a careful examination. A small, feeble pulse, unusually slow or rapid, with a short, feeble first sound, a weakening of the second sound, and a weak cardiac impulse, with increased deep dulness make us think of myocarditis with dilatation.

FUNCTIONAL DISTURBANCES.

The symptoms are attributed to the action of the influenzal poison on the cardiac nervous mechanism; either on the vagus or the cardiac ganglia. The principal functional cardiac disturbances are: 1, palpitation, which is very common; 2, irregular action of the heart; it may occur during or after the attack; 3, bradycardia, which is the most dangerous, as it sometimes leads to fatal syncope; 4, tachycardia; this is more common than bradycardia. These functional disturbances are often difficult to diagnosticate from the organic affections; they usually disappear in a few weeks.

As a rule, in addition to significant subjective symptoms, physical examination will show a feeble, diffuse cardiac impulse with a weak first sound, and in many cases an increased area of dulness. The strength and character impulse and sounds are much more important than the presence of a murmur or irregular rhythm.

In conclusion the author depreciated the use of coal-tar products, especially in patients past middle life.

DISCUSSION.

DR. SAMSON, Windsor, in the discussion spoke strongly against the use of the coal-tar products in influenza.

DR. MCPHEDRAN, Toronto, said that in certain cases he thought they were allowable, and that the number of cardiac cases found in influenza was relatively small. He had seen no organic ones.

DR. H. A. MCCALLUM, London, thought that strychnia and digitalis should be used.

The Relation Between the General Practitioner and the Specialist in Regard to the Treatment of Intranasal Disease.

DR. J. PRICE BROWN, Toronto, Ont., said that if the required treatment can be done by the family physician by all means let him do it, but if not he should refer the case to the specialist. Every practitioner should be able to examine the nose with the rhinoscope both anteriorly and posteriorly, to discriminate between the normal and abnormal and to diagnose the principal forms of disease which may be found within the organ.

Many conditions he can treat successfully. The instruments he may require are neither very numerous or costly. They consist of head mirror, throat mirrors of different sizes, nasal spiculæ of different widths, curved or angular scissors, cotton applicators, tongue depressor, saws, snares, insufflators and atomizers.

There are certain conditions which simple treatment will relieve, but in which persistent and regular treatment is imperative; particularly atrophic rhinitis. In many cases of subacute and chronic catarrh, the general practitioner can do all that is required. The author outlined the treatment of these affections.

Other papers read were by Dr. H. Meek, London, Ont., on Alexander's operation; Dr. P. G. Goldsmith, on "Causes and Treatment of Postnasal Discharge." Cases of various conditions were reported by Drs. Hadley Williams; J. Alex. Hutchinson; John Wishart; R. Ferguson, London, Ont.; H. Howitt, Guelph, Ont.; Hodge, London, Ont.; and R. B. Robinson, Ottawa. Drs. Geo. M. Gould, Philadelphia, and E. J. Barrick, Toronto, also read papers.

Therapeutics.

[It is the aim of this department to aid the general practitioner by giving practical prescriptions and, in brief, methods of treatment for the diseases seen especially in every-day practice. Proper inquiries concerning general formulae and outlines of treatment are answered in these columns without allusion to inquirer.]

Night-sweats.

The following combination is recommended by *Le Mois Therapeutique* in the treatment of night-sweats due to tuberculosis:

℞. Balsami peruvianæ .....m. xv 1
Acidi formici
Chloralis hydratis, āā.....gr. lxxx 5
Alcoholis (pure) .....℥iiiss 100

M. Sig.: Sponge the body with the foregoing combination at bedtime.

The following combination is frequently used locally in the treatment of night-sweats:

℞. Alumeni .....℥iv 15
Alcoholis .....℥ii 8
Aquæ .....Oi 480

M. Sig.: Apply locally night and morning with a sponge.

Sunburn and Prickly Heat.

The following combinations are recommended by *Merck's Archives* in the treatment of sunburn:

℞. Sulphuris precip. .....℥i 30
Zinci oxidi .....℥iv 15
Olei amygdalæ (expressed) .....℥i 30
Lanolini .....℥i 30
Ext. violet .....℥i 4

M. Sig.: Apply freely two or three times daily; or:

℞. Ichthyol .....℥ii 8
Olei amygdalæ (expressed) .....℥ii 8
Ung. aquæ rosæ .....℥vi 25
Lanolini .....℥vi 25
Olei rosæ .....gtt. ii 12

M. Sig.: Apply two or three times daily; or:

℞. Olei olivæ .....℥iv 15
Menthol .....gr. xv 1
Ung. aquæ rosæ
Lanolini, āā.....℥vi 25

M. Sig.: To be used as a dusting powder several times daily.

In cases of prickly heat the following is also recommended:

℞. Calamini .....℥iv 15
Zinci oxidi .....℥ii 8
Ichthyol .....℥i 4
Glycerini .....℥ii 8
Aq. laurocerasi q. s. ad.....℥vi 180

M. Sig.: Shake well and apply several times daily; or:

℞. Pulv. amyli .....℥iv 15
Lycopodii .....℥ii 8
Zinci oxidi .....℥i 4
Ichthyol .....℥i 4

M. Sig: To be used as a dusting powder several times daily. Alkaline, borax or bran baths at the body temperature are also beneficial. Anointing the body night and morning with some fat, such as petrolatum or cacao butter is of service as a prophylactic measure in persons who are subject to this annoyance. Silk or fine woolen underclothing should be preferred to cotton or linen. Strict attention to the elimination by the bowels and kidneys and a carefully-selected and nutritious diet are of great importance. As a drink, lemon juice or lime juice in barley water is very cooling and relieves the thirst.

Glycoheroin for Cough.

According to Haas and Saxe in *Amer. Med.* the most satisfactory method of prescribing heroin is in the form of the glycerin solution, glycoheroin. They used it in 20 cases of cough and 12 were cured, 7 improved and 2 unimproved. Their conclusions are that this is the best form in which to use heroin; it is especially valuable in whooping cough, as small doses of it are well borne by children and even infants, and the results very prompt and permanent. It is of service in pulmonary tuberculosis, in reducing the cough, nightsweats, pain and temperature without disturbing the appetite and digestion. In acute and chronic bronchitis the most obstinate cases yielded to it.

Mucomembranous Enteritis.

The most frequent cause of mucomembranous enteritis, according to A. Robin in *Amer. Med.*, is gastric hyperacidity. Consequently to correct the cause the following should be given:

℞. Precip. calcii carb.
Magnesiæ (calcined), āā.....℥iss 6
Sodii bicarb. .....℥i 4

M. Ft. chartulæ No. xii. Sig.: One powder after each meal, in the middle of the afternoon, and at bedtime in a little water.

Careful attention should be given to the diet. Fats, sauces, raw or fried articles, condiments and acid substances should be avoided. He recommends intestinal irrigation to be repeated daily for eight days, then two or three times a week. One quart of water should be used at a time at a temperature of 95 F., to which five or six drops of the tincture of sage (salvia) have been added in order to favor the contractility of the intestine.

Feeble laxatives should be employed; one or two teaspoonfuls of castor oil may be given, to which two or three drops of the following have been added:

℞. Tinct. opii
Tinct. belladonnæ
Tinct. hyoscyami, āā.....℥iss 6

M. Sig.: Three drops added to one or two teaspoonfuls of castor oil and taken as directed.

He also recommends massage daily, following the course of the large intestine.

Epicarin in Tinea Tonsurans and Circinata.

Van Harlingen and Dillard, in *Amer. Jour. Med. Sciences*, report excellent results from the employment of epicarin in the treatment of tinea tonsurans and tinea circinata. It was also used in the treatment of scabies, but with less satisfactory results.

It was used combined as follows:

℞. Epicarin .....℥iss 6
Alcoholis .....℥ii 60

M. Ft. lotio. Sig.: Apply locally.

Or in the form of an ointment, as follows:

℞. Epicarin .....gr. c 7
Cretæ albæ .....gr. xxx 2
Vaselini albæ
Lanolini, āā.....℥iss 45

M. Ft. unguentum. Sig.: Apply locally.

Each of the foregoing combinations proved very efficient in the treatment of tinea. However, the results obtained in scabies were not satisfactory, as the ointment irritated the skin quite severely and gave but little relief to the pruritus, which yielded promptly to the naphthol and sulphur ointment.

This preparation, according to the authors, is a condensation product of creasotinic acid and beta-naphthol, therefore combining the properties of creasote and naphthol. It is a reddish amorphous powder, soluble in alcohol, ether and liquid vaselin.

Chloroform as a Teniafuge.

Chloroform is a very efficacious teniafuge according to M. Leger as noted in *Merck's Archives*. In prescribing it for this purpose he recommends that the patient be kept on a milk diet for twenty-four hours previous to its administration, and a purgative enema given.

The next morning the following mixture is administered:

℞. Spts. chloroformi .....m. xl 2 65
Syrupi .....℥vi 25
Aquæ .....℥iv 120

M. Sig.: To be given an ounce at a time at intervals of forty-five minutes.

Between the third and fourth doses one ounce of castor oil is given or an ounce of German brandy. Very satisfactory results were obtained by him by this method of treatment, as shown by statistics given.

Local Hyperidrosis.

In the treatment of hyperidrosis of the hands, feet or axillæ, according to an abstract in the *N. Y. and Phila. Med. Jour.*, local baths of vinegar may be used, an infusion of walnut leaves and alum, a solution of potassium permanganate, or a tablespoonful of commercial formol in a quart of water. Subsequently the affected areas should be rubbed with the following lotion:

℞.	Naphthol	3i	4
	Glycerini	3ii	8
	Alcoholis	3xx	80

M. Ft. lotio. Sig.: Dilute one half with water and apply locally; or:

℞.	Thymol	gr. xv	1
	Acidi tannici	gr. lxxv	5
	Spts. vini gallici (camphorated)	℥vii	210

M. Ft. lotio. Sig.: Apply locally.

The affected parts should then be dried well and powdered with talcum, starch or bismuth subnitrate, or with the following combination:

℞.	Acidi salicylici	gr. xlv	3
	Amyli	3iiss	10
	Pulv. talci	℥iiss	75

M. Sig.: Locally applied; or:

℞.	Acidi salicylici	gr. xlv	3
	Pulv. alumeni		
	Naphthol B., āā	gr. lxxv	5
	Sodii boratis		
	Pulv. amyli, āā	3iiss	10
	Pulv. talci	℥iiss	75

M. Ft. pulvis. Sig.: To be dusted in the shoes in cases of sweating of the feet.

The following combination is said to serve a good purpose in excessive hyperidrosis:

℞.	Bismuthi subnitratis	3iv	15
	Sodii salicylatis	gr. lxxv	5

M. Sig.: For external use as a dusting powder in the shoes.

The following should be rubbed between the toes once a week:

℞.	Plumbi oxidi rubri	gr. xv	1
	Liq. plumbi subacetatis	℥i	30

M. Ft. lotio. Sig.: Apply once a week between the toes in excessive perspiration of the feet.

Medicolegal.

Use of Morphin Not "Cruel Treatment" of Spouse.—The Supreme Court of Georgia holds, in the case of Ring vs. Ring, that the habitual and intemperate use of morphin, unaccompanied by any willful infliction of pain, bodily or mental, on the complaining party, such as reasonably justifies an apprehension of danger to life, limb or health, is not such cruel treatment as the law recognizes as a ground for divorce.

Duty of Injured Person in Employment of Physician.—The Appellate Court of Illinois for the Fourth District holds, in Chicago & Eastern Illinois Railroad Company vs. Burridge, a personal injury case brought by the latter party, that an instruction stated the law correctly which told the jury that it was the duty of the party suing "to employ such doctor or doctors for the treatment of his injuries as ordinary prudence in his situation at the time of the injury and thereafter required; and to use ordinary judgment and care in doing so, and to select only such doctor as was of at least ordinary skill and care in his profession; but the law does not make him an insurer in such case that the doctor will be guilty of no negligence, error in judgment or want of care, and where such errors or mistakes occur in the treatment (the injured party using ordinary care) the injury resulting from such mistakes is properly regarded as part of the immediate and direct damages resulting from the original injury."

Liability for Support of Quarantined Persons.—The Supreme Court of Nebraska holds, in Dodge County vs. Diers, that, in the absence of a statute, a county is not liable for necessaries furnished to persons not paupers while quarantined in their residence for the time being. The Supreme Court Commissioners say that some states have statutes by virtue of which such liability exists in certain cases. But the liability in these cases is recognized as completely statutory so that if the quarantine was not imposed by the authority named in the statute, or was imposed before the statute took effect, or the persons quarantined did not come within the purview of the provisions creating liability for necessaries, the county or municipality has never been held. In consequence, where the statute goes no further than to provide for the maintenance of indigent persons while quarantined, or provides that the county or municipality shall be liable in case those chargeable with their support are unable to maintain them, the burden is on the claimant to show that the patients were paupers, or that those primarily liable were unable to respond. The mere fact that they are quarantined for the public safety does not relieve persons who are able to support themselves of the duty of so doing.

Larceny of Antitoxin.—The Supreme Court of New York, Special Term, New York County, says, in the case of People, on the relation of Lacina vs. Lavin, that the City of New York, through its department of health, for several years has been, and still is, distributing free of charge to the poor people antitoxin to be used as a preventive against and cure for diphtheria. The department of health consigns the antitoxin, which is put up in small phials, to certain druggists in the city, and authorizes them, on the presentation of a certificate by any physician of the city, to deliver to the physician free of charge, for the use of a poor patient, one or more phials of the antitoxin, the certificate stating that this antitoxin is for the treatment of a poor patient, to whom payment for the same would be a hardship. The relator, a practicing physician, who obtained three phials of the antitoxin on one of these certificates, the court says, was the agent of the city to administer the antitoxin to the patient he obained it for if she was unable to pay for it, and only in that event; but he administered it to her knowing that she was able to pay for it, and therefore he deviated from the terms of his agency, and did so to his own pecuniary advantage. In other words, he appropriated the antitoxin to his own use, and rendered himself amenable to subdivision 2 of section 528 of the Penal Code of the State of New York, which declares it to be larceny for one to appropriate to his own use public property in his control.

Employment of Nurse by Health Officer's Substitute.—The Appellate Court of Indiana, Division No. 1, says, in the case of Monroe vs. City of Bluffton, that the secretary of the board of health for the city and county, having given written authority to another duly qualified, practicing physician to act as health officer during his absence, thereafter absented himself from the city and county, and never afterward acted or assumed to act as health officer. The Indiana statutes provide that, "In case of death or removal of any town, city, or county health officer, the vacancy thereby created shall be immediately filled by the president of the board of trustees of the town, or the mayor of the city, or the county auditor as the case may be," etc. But from the time of the above appointment or attempted substitution, and for 40 days continuously thereafter, neither the county nor city had any health officer other than this appointee or substitute. In the meantime, the latter, acting under this appointment, and also verbal directions of the secretary of the State Board of Health directing him to immediately quarantine the house of the party suing, quarantined the house, and ordered and contracted with the party suing to take charge of and nurse and care for an indigent smallpox patient who had come there. The party suing believed at the time that the one so employing her was the health officer of the city, and the city subsequently paid the guards he contracted with for guarding the house. The court holds that the complaint of the party suing, setting forth substantially these facts, stated a cause of action for the value of the services rendered as nurse. It says that the Indiana statutes not only give local boards of health authority to take the necessary action to prevent the spread of contagious and

infectious diseases, but they make it their duty to do so in all cases, and that they shall take prompt action in such matters. No more important duty rests on the state than the preservation of the public health, and, to secure and protect the public health against the very dangerous and contagious disease of smallpox, the local instrumentalities and agencies created by the state are required to act promptly and effectively. It is true the secretary of the board of health does not have absolute authority independently of the board in matters pertaining to the public health. But, even if it be conceded that under a strict and literal interpretation of the law the party suing could not recover, courts are not always required to give full force to the exact letter of the law, but are oftentimes permitted, nay more, required, to relax somewhat the rigor of an exact compliance. It is true the general rule is well established that a person dealing with the agent of a municipality must take notice of the limit of his powers, and must know whether the authority assumed is within the statute. But it must be conceded that the facts pleaded showed an emergency existed requiring immediate action. And it may rightfully be said that the employment of a nurse to care for a person suffering from smallpox in a malignant form was an essential precautionary measure to prevent the spread of the disease, and that all that the health officer's substitute did was one entire transaction, which the city must repudiate or ratify as a whole. The city was without a regularly appointed health officer who could act when the emergency arose. The public at large, and especially the inhabitants of the city, were vitally interested in having precautionary measures against the spread of the disease taken immediately. The party suing and her premises were properly quarantined, and by one assuming to have authority to act. He did nothing that the city itself might not have done, but did only what the city in the proper exercise of its duty under the circumstances was required to do. The court thinks that when all the facts and circumstances are taken into consideration, the emergency that existed, the purpose for which the services were performed, the object sought to be accomplished, the necessity that existed that the services be performed, the law implied a promise to pay the reasonable value of the services of the party suing.

Current Medical Literature.

AMERICAN.

Titles marked with an asterisk (*) are abstracted below.

New York Medical Journal.

August 29.

1 *The Treatment of Wounds Inflicted with the Toy Pistol. W. Scott Schley.
2 *Is There a Constant Pigment Cell in the Cochlea? George S. Dixon.
3 An Improvement in Radiography. A Print Made by Direct Exposure and Developed in Half a Minute without a Dark Room. Sinclair Tousey.
4 *Regicides; Sane and Insane. (Continued.) E. C. Spitzka.
5 *Personal Experience Regarding Anesthetics. Edward W. Lee.
6 *Primary Tuberculosis of Abdominal Lymph Glands in the Adult. Paul F. Morf.
7 General Remarks on Diseases of the Stomach. Harry Warren Lincoln.
8 Report of Case of Pistol Shot Wound in the Neck; Laminectomy; Results. John C. Murphy.
9 The Treatment of the Summer Dairrhea of Children. (Concluded.) Adrian A. Landry.

1. **Toy Pistol Wounds.**—Schley insists on the importance of thorough cleansing of the wound, using an additional free incision, curetting away the sloughing areas, with free irrigation with saturated solution of boric acid or 1/5,000 bichlorid. The edges of the wound of entrance are trimmed, and a comparatively loose, moist, iodoform gauze packing with a large wet dressing of 1 to 5,000 or 6,000 bichlorid is applied and kept wet at home. Absolute thoroughness in this way has given excellent results. The danger and futility of attempting to care for these cases by a small incision or simple curetting and washing of the wound and removal of the wad, if it happens to be superficial, is proven by his past experience. Through-and-through drainage has been used where the hand has been nearly perforated, but the free opening of one side only is almost always sufficient. None of the cases thus treated have developed tetanus and tetanus antitoxin has been given but four times. He remarks that there are generally two wads to be looked for, and that the great danger of these wounds is the carrying in of extraneous matter.

2. **Cochlea Pigment Cells.**—In the case reported by Dixon there were found large numbers of brown, iron-free, pigmented cells like the branched cells of the choroid and iris. He thinks that these are probably normal and constant in the human cochlea and may become more abundant under certain circumstances, as in the case reported.

4. **Regicides.**—Spitzka continues his argument in respect to the non-insanity and degeneracy of regicides.

5. **Anesthetics.**—Lee is not enthusiastic over spinal cocainization. He finds local anesthesia with cocain often effective, and has done several abdominal sections by it. He has used the infiltration method in hernia and appendicitis. His most satisfactory work, however, has been done on the extremities. He finds if the limb can be elevated until quite blanched and an Esmarch bandage applied, local anesthesia is much more effective, and is free from the disadvantages which often follow when cocain is permitted to enter the general circulation. In one or two minor operations he has been able to use hypnotism, and reports one case. As regards general anesthesia, his preference is decidedly for chloroform. He thinks that ether has many disadvantages and more generally requires an expert for its administration than does chloroform. He does not consider it safer. He has even had chloroform administered by a layman in his practice, though he kept close watch of its action, and says he would have been afraid to use ether under such circumstances. In conclusion he remarks that there is no agent that will obliterate pain in surgical operations that is without danger.

6. **Tuberculosis of the Abdominal Lymph Glands in the Adult.**—This subject has received little attention. Morf investigated the postmortem records of the Rush Medical College and found 9 cases with involvement of the abdominal lymph glands out of 86 tuberculous cases. He reviews what has been written on the subject and the symptoms. The pain is not usually acute nor superficial. It is not attended with distension of the belly, vomiting, dulness nor diarrhea. It may, however, cause acute symptoms without ulceration of the peritoneum, as shown by a case reported by Richardson. The presence of a nodular, abdominal tumor in connection with localized pain and without diarrhea and extending over a long duration is significant. The usual general treatment is advised. Surgical intervention may be considered and abdominal section should be recommended in tubercular mesenteric disease, so soon as the abdominal symptoms make the diagnosis reasonably certain, as he thinks it probable that the same effects would follow as in tubercular peritonitis. The article concludes with a bibliography.

Boston Medical and Surgical Journal.

August 27.

10 *The Invalid's Egypt. F. Gordon Morrill.
11 *The Treatment of Degenerative Diseases of the Nervous System by Massive Doses of Strychnia, with Special Reference to Tabes Dorsalis, Progressive Muscular Atrophy, Optic Nerve Atrophy and Pseudomuscular Hypertrophy. Graeme M. Hammond.
12 *A Brief Summary of the Surgery of the Esophagus. Samuel J. Mixter.
13 Inferences to Be Drawn from the Examination of the Gastric Contents. Elliott P. Joslin.

10. **The Invalid's Egypt.**—Morrill describes the climate in the various health resorts of Egypt, of which he thinks Assouan has probably the best advantages. Its climate is warmer and dryer than most of the others, and it is easily accessible by train or boat. He warns against the incautious use of drinks in the form of water and milk without sterilization, and the avoidance of "catching cold," which is very easily accomplished in Egypt, especially at night. Prolonged exposure to the sun's rays is to be avoided. The best time to go to Egypt is to arrive there not later than December 1, and go directly to Assouan to remain until the middle of March or

later, after which one may safely go to Cairo by river, and after a short stay at any one of the three stations (Ghezireh, Helouan or Mena House) make his way to Ramleh, where the hotels open April 1, to remain until the time arrives for leaving the country. The best time to leave is about the middle of April.

11. **Strychnin.**—The use of massive doses of strychnin in certain degenerative diseases of the cord, such as tabes, progressive muscular atrophy, optic nerve atrophy and pseudo-muscular hypertrophy is advocated by Hammond. He bases his paper on the results of 11 cases, 4 of tabes, 3 of progressive muscular atrophy, 3 of optic nerve atrophy, and 1 of pseudo-muscular hypertrophy. The method of action assumed is that the strychnin improves the nutrition of the neurons in such a way as to arrest degeneration. Cases are reported in detail and the results are favorable. In no case, however, was the patient completely restored to health, nor was that anticipated. All he claims for the method is that it may in some cases arrest degenerative processes in disease, which have hitherto been regarded as hopeless. The amounts given by Hammond are large, the maximum dose reaching 2/3 of a grain three times a day, beginning with 1/40 to 1/50 gr.

12. **Surgery of the Esophagus.**—The chief causes calling for surgery of the esophagus are congenital malformations, such as double esophagus or pouches, impacted foreign bodies, malignant disease, syphilis and cicatricial stricture. Congenital malformation Mixter finds more frequent than generally supposed, especially congenital pouches. In many cases he has found the passage of a suitable bougie to relieve the difficulty to a considerable extent. Impacted foreign bodies are best relieved by esophagotomy or gastrotomy rather than prolonged or violent attempts with the forceps and similar instruments, though in the hands of experts these instruments should be first tried. While malignant disease is hopeless of cure, very much can be done to avert starvation and relieve the symptoms. Excision is seldom of benefit, excepting when the growth is very high up and it is possible to bring the lower end of the esophagus into the lower angle of the wound. As a rule we must be satisfied with relieving dysphagia. Dilating a stricture is the most common method of treatment, and is satisfactory in many cases, especially if food is introduced at the same time. For impassable or very irritable strictures esophagostomy or gastrostomy is demanded. Mixter much prefers esophagostomy to gastrostomy in disease high up. Syphilitic strictures are not common and should be treated with proper medication and dilatation. He thinks that the method of Abbe of sawing through the stricture with a string is the greatest improvement in the technic of esophageal surgery of recent years. By Dunham's method of thread swallowing he has been able to relieve the most desperate and apparently hopeless cases of multiple stricture both in children and adults. In conclusion he insists on the greatest care and delicacy of manipulation in all esophageal work.

American Medicine, Philadelphia.

August 29.

14 *The Destruction of Bacteria in Vaccine Pulp with Potassium Cyanid. Harvey R. Gaylord and David E. Wheeler.
15 *The Treatment of Congenital Luxation of the Hips. Gwilym G. Davis.
16 *The Danger that May Lurk in Blind Eyes. Cassius D. Wescott and Brown Pusey.
17 *Enteroptosis: Its Etiology, Symptomatology, Treatment and Prognosis. (Concluded.) Thomas R. Brown.
18 *The Matas Treatment of Aneurisms, with Report of a Case. W. O. Bullock, Jr.
19 The Medical Treatment of Dysmenorrhea. Frank C. Hammond.

14. **Vaccine Sterilization.**—Gaylord and Wheeler have found that a solution of cyanid of potassium, beginning with n/2,000 and extending to n/200, completely destroys the bacteria in vaccine lymph without in any way injuring it specifically. Although potassium cyanid is an active poison it is so volatile that in five to six days no trace can be found in solutions kept in test tubes plugged with cotton in the usual way. It would seem that we have in potassium cyanid a differential germicide capable of killing bacteria without injuring delicate protoplasmic structures. Its application to vaccine strongly suggests that the organism of vaccine partakes of the nature of animal protoplasm and is a protozoön.

15. **Congenital Hip Dislocation.**—David describes the requirements of operation for congenital hip dislocation and gives the history of its treatment. He considers Paci's treatment a real advance and the Lorenz application of extreme force a rather objectionable modification. The results in the properly applied circumduction method, according to the Paci plan, are in nearly all cases good in young children under seven or eight years of age. In older patients the treatment has not yet been thoroughly worked out.

16. **Danger of Blind Eyes.**—Wescott and Pusey call attention to the possibility of involvement of the sound eye in the retention of the blind single eye, reporting a number of histories. They also discuss the relative values of evisceration and extirpation of the eyeball, and conclude that it is hardly possible to destroy all the uveal tissue and that complete removal of the eyeball, according to the present evidences at least, is far safer. Even in children it is advisable. There is good evidence, they say, that the development of the orbit is not materially interfered with by enucleation in childhood.

17. **Enteroptosis.**—This paper is concluded in this number. The author concludes that: 1, in the great majority of cases the underlying cause is a congenital weakness of tissues, which predisposes to this condition; 2, in many cases, probably the majority, various accessory factors favor "a marked displacement of the abdominal organs in those so predisposed." He says:

> Of these factors most act either by increasing the pressure from above on the abdominal viscera, as by the use of corsets, belts, etc., or by decreasing the pressure from below upward, as after severe illnesses, pregnancy, marked loss of weight and strength, etc., while in only a comparatively small proportion of the cases does injury or violent trauma form a part.
>
> As to the symptomatology the undoubted tendency has been to ascribe far too many symptoms to the displacement of certain organs, notably the kidneys and the liver and far too few symptoms to other viscera, especially the stomach and intestines. . . .
>
> As to the proper treatment, far too much reliance has been undoubtedly placed by some on surgical interference. We should recognize that we are treating, in the great majority of cases, a displacement of several of the abdominal viscera, and surgical interference is only justifiable when the symptoms are referrable to an especial displaced organ or when dietetic, medicinal and mechanical treatment have been tried without success. . . .
>
> We should all remember . . . that, by care and watchfulness, we may often do by prophylaxis in the young what treatment, neither medical nor surgical, can do in those in whom the condition has become pronounced.

18. **Aneurisms.**—The Matas treatment of aneurism consists in excision and evacuation of the sac, closing of the mouths of the collateral vessels, scrubbing the interior of the cavity with sterile salt solution and closing the openings with chromicized catgut, sometimes using a second row of Lembert sutures over the first A case is reported which seems to show that a mild amount of infection is not necessarily fatal to success though it does delay the recovery. In addition to the lessened danger of gangrene from not interfering with collateral circulation, the operation has the advantage of preserving every available inch of the artery that is capable of aiding in restoring the circulation in the part beyond. Bullock does not favor the modified operation, aiming to restore the continuity of the vessel in sacculated aneurisms and still less the bridging over the gap in fusiform cases by using the sac wall for the purpose.

Medical Record, New York.

August 29.

20 *The Syphilitic Affections of the Heart and Aorta. Leonard Weber.
21 *Peritonitis (Peritoneal Adhesions) Caused by Muscular Trauma. Byron Robinson.
22 *The Quick and the Dead: A Plea for Urn Burial. W. J. Conklin.
23 *Hydrotherapy in the Treatment of Chronic Diseases. Frederick M. Rossiter.
24 *The Suprapubic Operation for the Radical Cure of Varicocele, with a Report of Eighteen Cases. Robert M. Thornburgh.

20. **Syphilitic Affections of the Heart and Aorta.**—Weber describes the usual course of this condition, calling attention particularly to the deficient blood supply from arterial involvement and its effects on the heart tissues. Myocarditis and subsequent degeneration are consecutive to the vascular lesions. The diagnosis is discussed at some length. The signs of active syphilitic lesions in other parts of the body in cases

of myocarditis go a long way to make the diagnosis certain. He remarks that relying on iodids alone will lead to disappointment, according to his experience, but if mercury is used with them or even without them and the patient's kidneys are sound, the results are good. He has been in the habit of ordering mercurial inunctions whenever practicable; when not, the bichlorid of mercury hypodermically or the biniodid by the mouth. He has found advanced cases of syphilitic aortitis less amenable to treatment than specific cardiac disease.

21. **Peritoneal Adhesions.**—Robinson describes the peritoneal adhesions that he has observed in a large number of necropsies, and which he considers due to muscular trauma. He finds none of these in children that have not walked and practically none under three years of age. The muscular trauma of parturition is mentioned as one of the causes of these adhesions. Their effects are described. They cause about one-third of all obstructions of the intestinal tract, and disorder the functions of peristalsis, secretion and absorption of the intestines, genitals, lymphatics, urinary and vascular tracts, and may entail symptoms that do not indicate their character or location. They increase in frequency from 25 to 65 years of age. Their utility is that they put a barrier on infectious invasion, imprisoning, starving and sterilizing bacteria, and are the great life-saving factors in acute inflammatory processes of the abdominal viscera by preventing peristalsis from disseminating infection, by obstructing the lymph channels leading from the infectious center, as, for example, the subject recovers from relapsing appendicitis more readily because the lymph channels from the diseased appendix are progressively eliminated. They are Nature's method of protection and repair.

22. **Urn Burial.**—The advantages of cremation are reviewed by Conklin, who maintains that for sanitary reasons as well as for many others it is in every way preferable to the usual method of burial.

23. **Hydrotherapy.**—The benefits to be derived from hydrotherapy are dilated on by Rossiter, who enumerates the various methods:

> The shower, the spray, hot or cold; the douche, hot or cold, alternating, and percussion; local or general, named according to area treated; the Brand bath, Bouchard bath, or graduated bath, the neutral bath, half-bath, hip or sitz bath, leg bath, foot bath, arm or hand bath; simple sponging, friction, towel rubs, wet sheet rubs, pail pour, hot or cold compresses, named according to location, alternating compresses, evaporating and non-evaporating compresses, the moist girdle, fomentations, the dry blanket pack, the wet blanket pack, trunk pack, chest pack, hip and pelvic pack, leg pack, wet sheet pack, enemas and effusions. All of these treatments are applicable to the home excepting the Brand bath, the graduated bath, the sprays and the douches.
>
> By the employment of one or more of these measures or combinations the following effects may be obtained: tonic, local or general, sedation, antispasmodic, nutritive, eliminative, diuretic, expectorant, antipyretic, antiphlogistic, hemostatic, emmenagogic, analgesic, vasodilator, vasoconstrictor, hypnotic.

Among the diseases which are benefited by this treatment are gastrointestinal disorders with a chronic tendency, dyspepsia, gastritis and enteritis (which can be decidedly relieved by the author's method), heart disease, chronic nephritis and especially chronic functional disorders. Among the hints he gives is one that the ice bag applied to the precordium at bedtime with cold friction will almost invariably give the patient immediate sleep when insomnia is apparently due to atonic condition of the blood vessels and consequent cerebral congestion in the horizontal posture. For the constipation, which is very common in gastrointestinal disease, he finds the wet girdle one of the most effective measures.

24. **Varicocele.**—The suprapubic operation is described by Thornburgh and a number of cases reported in military practice. The technic according to Girard was followed. It is described in detail, as is also the method of cleansing the hands with chlorid of lime and sodium bicarbonate.

Medical News, New York.

August 29.

25 *Extirpation of the Urinary Bladder. Frank Hartley.
26 *The Prognosis of Tabes: An Analysis of 140 Cases of Locomotor Ataxia. Joseph Collins.
27 *The Toxic Actions of Urotropin, with Report of a Case of Hematuria and Hemoglobinuria Following a Dose of Seven and One-half Grains. Warren Coleman.
28 Observations on Eighteen Abdominal Sections, Performed Within the Past Year, Including the Successful Removal of an Ovarian Cystoma Weighing Seventy-two Pounds. Edward N. Liell.
29 *The Effect of Erysipelas on Atrophic Rhinitis, with Report of Case. Lewis S. Somers.
30 Esophagoscopy. Edward A. Aronson.
31 *Indications and Counter-indications for Prostatectomy. L. Bazet.
32 Moral Insanity or Degeneracy. F. H. Stephenson.

25. **Extirpation of the Bladder.**—This operation may be required in malignant disease, tuberculosis, exstrophy, ureterovaginal fistula following uterine extirpation and in fibroids of the uterus. Hartley has collected 23 cases of complete removal for malignant tumors; 11 performed with intestinal implantation of the ureters, including 6 deaths; 7 with vaginal implantation of the ureters, with 1 death from shock. The total recoveries were 12 out of the 23 cases, or 52.17 per cent. Five patients died during the operation, 3 from collapse afterward, and 4 died a few days later. Vaginal implantation afforded the greatest proportion of recoveries and cases in which the ureters were not involved in the malignant process. The total extirpation of the bladder with implantation of the ureters elsewhere than the vagina gave 43.75 per cent. of recoveries; quite as good as partial extirpation with implantation into the reconstructed viscus. Intestinal implantation gave 6 deaths in the 11 cases. In the male he would advise complete extirpation of the bladder, but it is unsettled whether it is best to extend the ureters into the urethra or into the skin and wear a urinal, or whether we should put them into the intestine. What is offered seems to be in favor of the urethral or cutaneous method, since the deaths in these cases were largely due to avoidable causes. Tuberculosis has been the reason for operating in a number of cases, and Hartley reports 2 here, one in detail, and refers more briefly to the other. Both recovered. For exstrophy of the bladder, the extirpation of the viscus with the implantation of the ureters into the sigmoid flexure or the rectum has been performed 46 times with a mortality of 15 per cent., and 6.5 per cent. of this mortality represents infection of the ureters and kidneys immediately or at some remote period after operation; 8.5 per cent. of the mortality represents shock. The best methods for treating this condition if reconstruction of the bladder is not possible, seems to be either cystectomy with the intestinal anastomosis of Maydl or Pozzi; vesicorectal anastomosis (Frank); extirpation of the bladder and urethral implantation of the ureters (Sonnenburg), or extirpation of the bladder and vaginal implantation of the ureters (Pawlik). The remaining conditions requiring extirpation are rare and did not come under Hartley's observation. He remarks in conclusion that intestinal anastomosis presupposes intact ureters and gives rectal continence, while the vaginal implantation gives slightly better results, but without urinary continence.

26. **Tabes Dorsalis.**—Collins reports one or two of the 140 cases and calls attention to the change of type of disease of later years. He thinks the prognosis is more favorable in the later type, especially since Fraenkel's treatment has been in vogue. That which has a less favorable prognosis is where the stomach is more or less involved. We no longer see the original type of tabes delineated by Duchenne, Romberg and others in which the name "progressive locomotor ataxia" seemed to be so descriptive. The aberrant forms are more common. As to the cause of this change, he thinks no one factor is entirely responsible, but the disease is more generally recognized by the practitioner, and probably treated earlier. We have learned that a certain mode of life, dietary, medicinal treatment, massage, etc., have not infrequently such influence on the disease that the process seems to stop advancing while they are being employed.

27. **Urotropin.**—Coleman finds that the administration of urotropin may be occasionally attended by toxic effects, strangury, etc., which are comparatively frequent if the drug is not properly diluted. The development of toxic effects is not always, or necessarily, correlative with the size of the dose. The individual susceptibility varies greatly. The following symptoms have been observed: Minor toxic actions, such as irritation of the stomach, diarrhea, abdominal pain, a measles-

like rash, headache and ringing in the ears and renal irritation, sometimes with hematuria. The bladder symptoms include strangury, which is the most common effect, and irritant action on raw surfaces in the urinary passages. Eight cases of hematuria have been reported with one doubtful case, to which he adds a case personally observed. In one case hemoglobinuria was associated. The more important of these effects have been reproduced by intravenous injections of formaldehyd. The toxic action of urotropin is evidently due to a special susceptibility to the action of formaldehyd in the dissociation of the urotropin molecule or to interference with the usual disposition of formaldehyd in the body, or to the liberation of an unusual quantity of formaldehyd. The toxic effects of urotropin generally disappear completely within a few days after withdrawal of the drug. A number of cases are reported from the literature and personal observation.

29. **Atrophic Rhinitis and Erysipelas.**—Somers' case was one of atrophic rhinitis of long standing, which completely disappeared after an attack of erysipelas. He has found in the literature but two like cases, both reported by the same observer, Francesco, in the *Revue Hebd. de Laryng. d'Otol. et de Rhinologie*, March 8, 1902. The suggestion is offered that in a small class of cases where ozena has been resistant to all other treatment, it might be well to try an injection of Coley's fluid as a last resort.

31. **Prostatectomy.**—Bazet would postpone the operation when only dysuria and nocturnal incontinence exist, until chronic and almost complete retention, when it will give the best result. In the case of incomplete and chronic retention with a residue of three to six ounces and the use of the catheter three or four times every twenty-four hours, prostatectomy should be employed if the prostate is large. Another indication for prostatectomy is the presence of recurrent calculi. Of the contraindications he considers age the first. Beyond 72 years the chances of success diminish and the benefits of the operation for the short period of remaining life are not proportionate. Infection is another contraindicatory factor, especially when it is accompanied by acute congestion and fever and chronic lesions of sclerosis and renal infection already exist.

St. Louis Medical Review.

August 29.

33 Personal Experience in Treatment of Typhoid Fever. W. P. Allee.
34 Ibid. Tinsley Brown.

Cincinnati Lancet-Clinic.

August 29.

35 The Recent Outbreak of Tetanus, with Considerations on the Treatment. N. P. Dandridge.
36 Fees, Collections and Deadbeats. M. A. Tate.
37 Physicians' Mistaker. George J. Monroe.
38 Surgery of Prostate, Pancreas, Diaphragm, Spleen and Thyroid. (Continued.) B. Merrill Ricketts.

Brooklyn Medical Journal.

August.

39 *Uses of Ergot. Alfred T. Livingston.
40 Scarlatina. F. E. Lambert.
41 *Some Indications for Inducing Abortion and Premature Labor. William P. Pool.
42 Treatment of the Summer Diarrheas of Infants. C. Legrand Kerr.

39. **Ergot.**—Livingston here publishes a paper written a number of years ago, of the same tenor as the one published in THE JOURNAL, March 21, 1903. One of the opinions that he now holds, different from those expressed then, is that ergot acts directly on the fiber of the muscles instead of on their vasomotor centers. In the main the ideas are about the same, proclaiming that ergot is the equalizer of the circulation.

41. **Abortion.**—The indications for abortion are stated by Pool as: Contracted pelvis, in which he advises operation in the thirty-sixth week in suitable cases; chronic nephritis; diabetes; pernicious vomiting (as a last resort); heart disease with aortic murmur, mitral stenosis and cardiac insufficiency; tuberculosis in which possibly curable cases may be made incurable by this physiologic function of pregnancy. He says a woman having an active form of tuberculosis, as evidenced by physical signs and the discovery of the bacillus, should not become pregnant. If conception occurs it would be advisable to terminate the pregnancy at the earliest possible moment.

Archives of Pediatrics, New York.

August.

43 *A Case of Decapsulation of Both Kidneys in a Boy Nine and One-half Years Old. Thomas M. Rotch and H. W. Cushing.
44 *Varicella Gangrenosa; Its Apparent Frequent Association with Tuberculosis. William A. Edwards.
45 The Determination of Fat and Total Solids in Milk. Henry L. K. Shaw.
46 Deficient Proteids in Infant Feeding. Vanderpoel Adriance.
47 *A Note on Abdominal Auscultation. Henry L. K. Shaw.
48 Report of a Case of Thymus Enlargement in an Infant; Sudden Death; Autopsy. Eleanor C. Jones.
49 Report of a Case of Tonsillar Ulcer of Vincent. Lawrence T. Royster.

43. **Kidney Decapsulation.**—The case reported by Rotch was unsuccessful, the child dying two weeks after operation, but still it was of interest as showing a temporary improvement. The death was unexpected, as the patient endured the operation well. The case was an extreme one with serious impairment of function of the kidney, and without the operation death was inevitable in a short time.

44. **Varicella Gangrenosa.**—Edwards calls particular attention to the relations of this condition with tuberculosis, but even here he holds that it is probably due to the ordinary pathogenic organisms. The lack of resistance of a tuberculous patient to infection of all kinds and the probability of his having staphylococci and streptococci already in the respiratory tracts favors its occurrence.

47. **Abdominal Auscultation.**—The value of abdominal auscultation in infants is noted by Shaw, who shows that in young children the respiratory sounds are transmitted and can be distinctly heard well over the abdomen. All adventitious sounds, especially from the lower lobes of the lungs and the lower and diaphragmatic portions of the pleura, are generally so transmitted that they are recognizable, and sounds thus heard are synchronous with respiration and differ from the usual intestinal sounds. His attention was first called to this fact over a year ago in a case of lobar pneumonia. Râles could be heard over the abdomen before they were audible over the chest. Since then he has listened over the abdomen of a large number of infants to determine the diagnostic value of abdominal ascultation.

Illinois Medical Journal, Springfield.

August.

50 *Traction Injuries of Arteries. S. M. Wylie.
51 The Legal Status of the Doctor. Herbert C. Jones.
52 *On the Toxicity of Methyl Alcohol in Extracts and Medicine. R. H. Main.
53 Radiotherapy, with Report of Eleven Cases. Charles D. Center.
54 Clinical Report of Two Tumors Benefited by the X-Ray. W. J. Eddy.
55 Retinal Hemorrhages in Relation to Degenerations of the Circulatory Apparatus. Thomas A. Woodruff.
56 Modern Surgery of Congenital Cleft Palate in Infancy. S. R. Hopkins.

50. **Traction Injuries of Arteries.**—Wylie notices the injuries of the arteries that may be due to contusions or traction, and suggests that in every case of injury to an extremity, subject to traction or contusion force, the circulation should be carefully noted, and if there is absence or feebleness of arterial pulsation, a careful inquiry should be made to determine, and, if possible, to locate the cause by stethoscopic examination along the exposed part of the vessel for adventitious sounds, etc. He gives cases of injury of the popliteal and axillary arteries and their treatment, which consists in rest and immobilization, external heat and careful watching for the return of circulation. Until artery resection with suture of the entire circumference of the vessel becomes a more practical procedure than it is at present, it offers no hope of overcoming the difficulty. When there is complete death of the part supplied by the arteries, amputation is the only recourse.

52. **Methyl Alcohol.**—Main finds that methyl alcohol is an active and dangerous poison, extensively used in extracts, spirits and medicines intended for internal use, and that its presence is not suspected by the consumer. In this way it has caused death or blindness in numerous instances. He suggests that the Pure Food Commission require every manufacturer to print on the packages the formula of the contents.

and prosecute every one failing to do so. He advocates also a federal tax on methyl alcohol, so that its substitution for grain alcohol would be unprofitable.

Mobile Medical and Surgical Journal.

July.

57 *One Hundred Consecutive Cases of Myoma of the Uterus. Guy L. Hunner.
58 Other Sources of Typhoid Infection than Through the Medium of Drinking Water, and How to Guard Against Them. Searle Harris.
59 *Hay Fever. Paul S. Mertins.
60 What Precautions Should Be Taken by the State and Municipalities in the Care and Management of Tuberculous Patients? W. H. Blake.
61 Some Remarks on the Causes of Convulsions in Children. William C. Williams.

August.

62 A Trip to England and Some Reminiscences of Lord Lister. E. L. Hill.
63 *Tuberculosis in Animals, with Special Reference to Bovine Tuberculosis. C. A. Cary.
64 Am I My Bother's Keeper? J. R. G. Howell.

57.—This article appeared elsewhere. See THE JOURNAL of August 29, ¶52, p. 580.

59. **Hay Fever.**—Six cases treated by adrenalin are reported by Mertins. In all the patients found it the best thing they had ever used. In three the disease was aborted and in three the symptoms were almost completely relieved. No unpleasant effect or habit followed. He considers adrenalin almost a specific in relieving the conditions.

63. **Tuberculosis in Animals.**—Cary's paper is largely a citation from the literature, and he finds that human tuberculosis can be transmitted to the lower animals and bovine tuberculosis to other animals. There is strong evidence that many infants and older children have contracted tuberculosis from the drinking of milk from tuberculous cows, and undoubted cases of accidental human inoculation with the bovine bacillus have occurred. He believes that tuberculous cows can be kept for breeding purposes if isolated from their own calves and the healthy cattle, and the milk thoroughly sterilized before feeding it to cattle and pigs. They may also be used as food provided the tubercular lesions are few and can be removed without infecting the meat and the meat is thoroughly cooked. All meat-producing animals, especially cattle and swine, should be carefully inspected before their flesh is utilized and all highly infected animals condemned and tanked. Thorough cooking is needed in every case.

St. Louis Courier of Medicine.

August.

65 *Vibration Massage in the Treatment of Chronic Prostatitis. Louis E. Schmidt.
66 The Prophylaxis and Treatment of Scarlet Fever. E. W. Saunders.
67 Veratrum Viride in Puerperal Eclampsia. W. L. Johnson.
68 Malaria; a Review of Some Recent Literature. (To be concluded.) John Zahorsky.
69 *A Therapeutic Suggestion. H. N. Chapman.

65. **Vibration Massage.**—Schmidt recommends the use of vibration massage in prostatic hypertrophy, especially in cases where the usual massage fails and also those where small inflammatory nodules are left after general inflammation. Vibratory massage is applied to each nodule and defines them by their sensitiveness. It can also be recommended in isthmical inflammation combined with old infiltrations in the prostatic urethra and hypersensitiveness of the caput gallinaginis. The best instrument for this purpose is the Benique sound, to which a metal spiral is attached, and vibration given to this with a hammer. He would also advise it in case of simple sexual exhaustion where no infection or inflammation of the prostate exists. The mechanical appliances which can be controlled by electric motors are suggested as the best means for this form of therapy.

69. **Mammary Cancer.**—A therapeutic suggestion of Chapman is to use the *x*-ray for all forms of mammary cancer, not for the treatment of the breast *per se*, but to put the axillary glands in as perfect a condition as possible. When this is done, the cancerous mass should be removed with a knife, but the axillary glands preserved as a defensive barrier. After the wound has healed the glands and breast should be again submitted to the *x*-rays. This suggestion is offered after the experience with and observation of four cases, the axillary glands being removed in each and in each case the final result was disastrous.

Pediatrics, New York.

August.

70 *Diseases of Children Due to Faulty Nutrition. William N. Sullivan.
71 *Of What Value Are Drugs in the Treatment of Children? Frederick Leavitt.
72 School Life in Relation to Health. J. H. McCassy.
73 A Case of Mitral Stenosis. Francis W. Sinkler.
74 Endocarditis Following Diphtheria. Henry D. Jump.
75 *Practical Notes on the Diagnosis of Infantile Eclampsia. John Zahorsky.

70.—This article appeared elsewhere. See THE JOURNAL of July 25, title 104, p. 284.

71. **Drugs in Infant Diseases.**—Leavitt's article is a skeptical one as to the value of drugs in diseases of children. He finds that as many cures are accomplished with placebos which contain practically no drugs at all as in energetic drugging. He says he does not mean to be a nihilist as regards medicine, but thinks that the community of children is certainly overdosed. Of a few drugs he makes partial exceptions, such as castor oil and calomel in acute gastroenteric affections and the special use of certain drugs in poisoning, heart failure, etc. Quinin is an antiperiodic and prophylactic in malaria and mercury and potassium iodid useful in syphilis. Antitoxin in diphtheria is certainly a godsend, but there are very few others for which he says a good word.

75. **Infantile Eclampsia.**—The influence of peripheral irritation in producing eclampsia is questioned by Zahorsky, and he thinks that we should sharply distinguish between great irritability of the nervous system due to high fever and to that caused by faulty nutrition. A toxic, circulatory, organic, or functional disease of the brain or meninges must be considered in the diagnosis of cases of convulsion. In his observation in the last few years he has found some constitutional or general disease at the bottom in nearly every case. He does not mean that peripheral irritation should not be sought, but the first question to ask is, what induces the increased irritability?

Columbus Medical Journal.

August.

76 *The Extension of Infection in Otitis Suppuration. John Edwin Brown.
77 *What the Medical Practice Act Has Accomplished in Ohio. S. B. McGavran.
78 The Development of Obstetric Surgery. James U. Barnhill.

76. **Otitic Suppurations.**—Brown reports several cases of otitis suppuration, 5 of extradural abscess, 1 perisinuous, 2 of sinus thrombosis and 3 of meningitis, all except the last mentioned three surviving, thus bearing out the opinion of surgeons as to the uniform fatality of meningitis in these cases. Nearly all were operated on.

77. **The Ohio Medical Practice Act.**—M'Gavran details the progress that has been made since the passage of the medical practice act, the opposition which it first received and the general good effects that have followed its execution. It has compelled not less than 500 so-called practitioners to give up practice and a good deal more than that number have left the state without attempting to register. Its opponents have been converted to its support. The medical colleges have practically been reformed and the three fraudulent ones that existed abolished. Ohio, instead of being the dumping ground for other states, has been elevated to the very first rank.

Woman's Medical Journal, Toledo.

July.

79 Iritis Spongiosa. Adeline E. Portman.
80 Diarrheal Diseases of Children. Jennie Ghrist.
81 Nephritis Albumenoso; Report of Case. Mary A. Ardery.
82 Medical Ethics. Margaret E. Colby.
83 Rupture of the Heart; a Case. Minerva Porter-Wertz.
84 President's Address, State Society, Iowa Medical Women. Jessie V. Smith.

Northwest Medicine, Seattle, Wash.

August.

85 Some Characteristics of the Human Mind. J. B. Loughary.
86 The Prevention of the Spread of Venereal Disease. M. Hugh Foster.
87 Operative Treatment of Abnormal Tonsils. John A. Donovan.
88 The Penalty of Genius. Ernest Crutcher.
89 Methodical Training in Surgical Technic. R. C. Coffey.
90 A Fatal Case of Hemorrhage from Placenta Previa; Inversion of the Uterus; Recovery. George S. Wright.

Buffalo Medical Journal.

September.

91 Light Waves, Visible and Invisible. Frederick H. Millener.
92 Treatment of Fresh Fractures of the Leg by Massage and Passive Movements. David E. Wheeler.
93 Fourteenth International Medical Congress. Jefferson D. Griffith.
94 The Physician's Electrical Outfit and Its Daily Use. Joseph C. Clark.

Chicago Medical Recorder.

August 15.

95 Rupture of the Uterus in Pregnancy and During Labor; Its Etiology, Diagnosis and Treatment. Georg Schmauck.
96 Report of Thirty-four Cases of Perineal Prostatectomy. (Concluded.) John B. Murphy.
97 Constipation. Alfred D. Kohn.
98 Tetanus. Frank P. St. Clair.

Southern Practitioner, Nashville, Tenn.

August.

99 Alcohol as a Therapeutic Agent. J. S. Cain.
100 *Purpura Hemorrhagica and Its Treatment. W. F. King.

100. **Purpura Hemorrhagica.**—King's patient was a man of 32, subject to attacks of purpura hemorrhagica, lasting for five to eight days and recurring at long intervals. The last attack was aborted by internal administration of ten drops of adrenalin chlorid, given in one-fourth of a glass of water every two hours until the bleeding ceased. Four doses were taken and five more when the symptoms recurred a day or two later. The drug was continued afterward every six hours for four days, then twice and once a day for four or five days. There has been no recurrence of the tendency to purpura since.

New Orleans Medical and Surgical Journal.

August.

101 *Typhoid Fever Among Children. E. M. Dupaquier.
102 *Surgical Treatment of Empyema in Children; with Report of Cases. John F. Oechsner.
103 Abortion: Its Treatment by the General Practitioner; Report of a Case Complicated by Acute Suppurative Appendicitis and Ovarian Cyst. A. C. King.
104 Phlyctenular Ophthalmia in the White and Black Races, with Notes on Its Local Treatment. Henry D. Bruns.
105 Report of a Case of a Hermaphrodite. C. L. Hope.

101. **Typhoid Fever in Children.**—Dupaquier has analyzed the reports of the New Orleans Board of Health with reference to the occurrence of typhoid in children in New Orleans, especially of late years. He finds that typhoid may occur at any age, and nurslings are as liable to be infected as older children. Of his twelve cases none of them presented the characteristic temperature curve. The pulse was high from the start with signs of cardiac weakness. The stools were characteristic. The abdomen was hardly tympanitic, none presented hemorrhage or perforation. Roseola was seen in three cases. The spleen was palpable in all, not very enlarged in any. Some cases simulated meningitis. He considers the diazo-test an aid to diagnosis, though not at all pathognomonic. The management of these cases was far from easy; children are not so easy to control and keep in bed. There are probably many cases of ambulatory typhoid in children, he thinks, though their resistance is wonderful. From observation he finds the relation to tuberculosis is decidedly marked; of his 12 cases, 3 died of tuberculosis subsequent to the typhoid attack, and the Widal test proved that they were originally typhoid. It leaves in its wake a condition of anemia which renders the patient susceptible to any infectious disease, thus explaining the relation of typhoid to tuberculosis. All mild cases escape diagnosis. In conclusion he says there are, however, a number of cases of fever, neither malarial or typhoid, which are treated by drugs when all they require is rest in bed and a little dieting.

102. **Empyema in Children.**—The summary of Oechsner's paper is as follows:

1. Physical signs are not always marked—absence of vocal fremitus is an important sign and more or less constant. 2. Exploratory puncture should always be practiced to confirm the diagnosis. 3. The prognosis of pneumococcic empyemata is very favorable. 4. Aspiration should only be resorted to tentatively and as a means of relief in emergencies. 5. In radical operations rib resection is to be preferred. 6. Irrigation should never be practiced unless there be some special indications for same. 7. A diagnosis should be rigidly sought and, once verified, operative measures instituted as soon as possible. 8. In the matter of promoting lung expansion, various devices, such as inflating rubber balloons, blowing soap bubbles, etc., to suit the caprice of the child, which soon tires of any one form of entertainment, should be instituted.

Virginia Medical Semi-Monthly, Richmond.

August 7.

106 The Diagnosis of Smallpox. Llewllyn Eliot.
107 A Report of One Hundred Consecutive Obstetric Cases. George Barksdale.
108 Uses and Abuses of Formalin in Surgery. John L. Jelks.
109 Adaptability of Western Texas for the Care and Treatment of Consumptives. C. H. Wilkinson.
110 Pathology and Symptoms of Constipation. Mark W. Peyser.
111 Some Suggestions as to the Control of Venereal Diseases. W. H. Prioleau.
112 Medical Expert Evidence. (Continued.) Fred J. Mayer.

California State Journal of Medicine, San Francisco.

August.

113 *An Unusual Infection Causing Acute Suppurative Appendicitis. Harry M. Sherman.
114 *Ununited Fractures of Lower Extremity. LeMoyne Wills.
115 *A Study of the Health of University Girls; the Relation of the Physician to Preventive Medicine. Mary E. B. Ritter.
116 Diploma vs. Certificate. William C. Tait.
117 The Cure of Cross Eyes. Vard H. Hulen.
118 Appendicitis, with Tabulated Report of Seventy-one Consecutive Operations. W. W. Beckett.

113. **Appendicitis.**—In the case reported by Sherman a pure culture of the Friedlander bacillus was found. This germ was considered the cause of the infection.

114. **Ununited Fractures of the Lower Extremity.**—Wills reports cases of fractures of the lower extremity with skiagraphs, showing the irregularities of union, and calls attention to the futility of any treatment in fractures of the lower end of the femur with turning out of the ends of the bone except incision, freshening ends and suturing with heavy silver wire. He insists on the necessity of immobilization of the leg and thigh on the body by a plaster spica from the toe to the waist and the relaxation of the calf muscles by flexion of the knee to an angle of 45, also the importance of equable pressure about the entire limb, and especially at the seat of fracture.

115. **The Health of College Girls.**—From a study of college girls and school children in the University of California, Ritter holds that the majority improve in health during the four years of college life, that is, those who take their studies seriously and rationally. A college education does not necessarily injure the health of women. The seeds of subsequent ill health are sown at an earlier age and are not the consequence of study. The causes of ill health are mainly traceable to unhygienic living or the sequence of infectious disease. In a large proportion of women students college life, with the mental stimulus of a purpose, improves their health and fits them to become better disciplined and more intelligent mothers. More careful observation on the part of physicians and instructions to parents would, to a large measure, improve the existing unsatisfactory conditions.

Medical Age, Detroit.

August 25.

119 The Treatment of Pulmonary Tuberculosis. Starling Loving.
120 Notes on Typhoid Fever. E. N. Hall.
121 Diseases of the Mind. E. A. Cherry.
122 Porro-cesarean Section Necessitated by Malignant Disease of the Uterus. R. C. McChord.

Medical Review of Reviews, New York.

August 25.

123 Patience vs. Operation. C. A. Von Ramdohr.

Medical Fortnightly, St. Louis.

August 10.

124 Method of Catheterizing Both Ureters in the Male Subject; Making Use of the Ureter-cystoscope of His Own Devising. Bransford Lewis.
125 The Bossi Method in the Treatment of Puerperal Eclampsia; Report of Two Cases. W. H. Vogt.

New Yorker Medicinische Monatschrift.

July.

126 Ueber Blaulicht. B. Reko.
127 Occultismus, Psychologie und Medicin. Karl Gumpertz.

Nashville Journal of Medicine and Surgery.

July.

128 The Causes of Ill Health of Women of To-day. Walter Lenehan.

Bulletin of the Kentucky State Medical Association, Louisville.

August.

129 Enterocolitis of Infants. J. T. Reddick.
130 Second Summer Complaint of Infants. Willis R. Moss.

131 Chemical and Microscopic Examination of Mother's Milk Necessary in the Management of Malnutrition, Indigestion and Colic of Infants. L. B. Cook.
132 *The Matas Treatment of Aneurisms, with Report of a Case. W. O. Bullock, Jr.

132.—See abstract 18 above.

Pennsylvania Medical Journal, Pittsburg.
August.

133 The Home Modification of Milk for Infant Feeding. Alfred Hand, Jr.
134 Brain Syphilis. Samuel Ayres.
135 The Duty of the State to Unborn Generations. J. Newton Hunsberger.
136 Suppurative Bone Diseases. Stewart LeRoy M'Curdy.
137 About Laws Relating to the Practice of Medicine. A. R. McCarthy.

Western Medical Review, Lincoln.
August 15.

138 Some Observations on Convulsive Conditions. F. E. Coulter.
139 Sciatic Neuralgia. F. A. Butler.
140 Mental Therapeutics in Medicine. J. M. Aikin.
141 State Control of Epileptics. S. K. Spalding.
142 Systematic Examinations, Especially Relative to Nervous Troubles; a Plea. F. E. Coulter.
143 Goiter; Diagnosis and Treatment. Charles C. Allison.
144 Some Surgical Mistakes. H. H. Everett.
145 Can We and Should We Avoid Touching and Manipulating the Tissues in Operation Wounds with Our Fingers? A. F. Jonas.

New York State Journal of Medicine, New York.
August.

146 Observations on an Epidemic of Dysentery. Frank W. Shipman.
147 The Surgical Treatment of Colitis. C. L. Gibson.
148 The Physician's Personal Side. M. B. Van Buskirk.
149 *Finsen's Phototherapy in Variola and Various Dermatoses. Francis P. Kinnicutt.
150 Further Observations of General Interest Regarding the Course and Management of Incipient Senile Cataract. J. H. Woodward.
151 A Case of Abscess, Diagnosed as One of Brain Tumor. Hermon C. Gordinier.
152 *Suggestions Favoring a Standard Technic in Operative Surgery. Edward W. Lee.
153 The Therapeutics of Conversation. J. L. Greeley.

149.—See abstract in THE JOURNAL, xl, p. 1206.

152.—Ibid., p. 1205.

FOREIGN.

Titles marked with an asterisk (*) are abstracted below. Clinical lectures, single case reports and trials of new drugs and artificial foods are omitted unless of exceptional general interest.

British Medical Journal, London.
August 22.

1 *The Water Supply for Landing Parties and Naval Brigades. J. Falconer Hall.
2 *A Surgeon's Notes with the Naval Brigade, China. Lloyd Thomas.
3 Some Notes on a Mounted Bearer Company. H. Hathaway.
4 Poverty of Attraction for Man to Become Stretcher Bearers, and the Consequent Inefficiency of that Section. G. Arbour Stephens.
5 Training of Volunteer Bearers and the Position of Regimental Medical Officers. Peter B. Giles.
6 Suggestions Regarding the Personnel, Equipment and Training of Medical Units Attached to Volunteer Infantry Brigades. William Sheen.

1. **The Water Supply in Military Operations.**—Hall describes the various methods of purifying drinking water for landing parties, and concludes that boiling the water is the best. Where this can not be done the Berkefeld filter (sterilized at least once a day) should be used. Chemical methods are practically useless, as they do not for the most part destroy the active bacteria, and are too complicated for men to understand and carry out thoroughly.

2. **A Surgeon's Notes in the China Relief Expedition.**—The surgeon of the British naval brigade, Lloyd Thomas, gives an account of the sanitary aspects of the trip from Tiebtsin to Pekin for the relief of the legations. He remarks on the general neglect of the Chinese as to sanitary matters, but that their wells were an exception, most of them having small elevations built about their mouths to exclude surface water. The principal suffering seems to have been from the heat, and heat stroke was common. A large number of transient cases occurred. Only two of the total number, however, died from this cause. The best treatment was topical applications of water.

The Lancet, London.
August 22.

7 *Sciatica: An Inquiry as to Its Real Nature and Rational Treatment, Founded on the Observation of Upwards of 400 Cases. William Bruce.
8 *The Significance of Pain and Tenderness in Cases of Inflammation of the Appendix. C. W. Mansell Moulin.
9 *On the So-called Stokes-Adams Disease (Slow Pulse with Syncopal Attacks, etc.). William Osler.
10 Intestinal Anastomosis for Prolapsed Small Intestine. R. W. Murray.
11 A Case of Sapremia Due to Pyorrhea Alveolaris Simulating Typhoid Fever. J. Walter Carr and E. W. Roughton.
12 *Note on the Treatment of Chorea by Aspirin. R. T. Williamson.
13 *Amputation of the Leg Under Hypnotism. Frank G. Aldrich.
14 The Successful Treatment of Thoracic Aneurisms by Large Doses of Iodid of Potassium. Wilfred R. Kingdon.
15 Bradycardia in Health. Robert J. Blackham.

7. **Sciatica.**—From an analysis of over 400 cases, Bruce concludes that in most cases the primary trouble is in the joint itself. He suggests the following routine in examination:

Ask the patient to lie down, as he stands in his clothes, on his back or an even firm couch; then, bending the affected limb at the knee, perform the passive movements of flexion, external rotation, internal rotation and extension by Thomas' method at the hip joint of the affected leg. If the case be at all recent one or more of these movements will cause pain, very often sharp pain, as the patient's countenance frequently reveals. Having carefully noted these signs, then ask him to undress and proceed to inspect the gluteal region. With the patient lying flat on his face and relaxing his muscles, you note whether there is wasting in this region or a diminution in the original number of the folds of the nates, and, on comparing those of the opposite hip and the two thighs also together, I venture to predict that in almost every case of sciatica you will discover softening or wasting and flattening of the hip muscles and more or less obliteration of the natal folds of the affected side. With the patient lying on his sound side, you then proceed to inspect the capsule of the hip joint. In some cases you will find it more prominent on the affected side and in a very few (but very seldom, for obvious reasons), you may be able to discover that there is increased heat over the joint. The position of the articulation is best made out by making sure of the exact relation of the anterior superior iliac spine and the highest point of the trochanter corresponding to the joint you suppose to be affected. The next thing to do is to examine carefully and without prejudice the presence or absence of tenderness on pressure over the capsule, . . . keeping in view the fact that the patient is not an impartial witness, so to speak; he is very apt to confound symptoms with signs, and his mind has been so intent on the suffering, say, in his foot, that he refuses to help you in your attempts to discover the important sign you wish to make out, i. e., whether coxal tenderness be present or absent. . . . In many cases moderate pressure with the point of the thumb over some part of the capsule causes so much pain that he winces unmistakably. Of course, to make yourself certain, you compare the two sides and, by all means, follow the line of the sciatic nerve and try to discover whether there is or is not tenderness on pressure along its course.

He describes the anatomy, especially of the nerve supply, and holds that sciatica is some affection of the hip-joint and not neuritis of the sciatic nerve, and that it is connected with the gouty and rheumatic diathesis, and also with so-called non-articular rheumatic arthritis of the hip. The flattening of the glutei and obliteration of the folds of the nates strongly support his contention. We should remember that the nerve supply of these muscles comes not from the sciatic but from the sacral plexus. He asks, on the other hand, why, if sciatica were really an affection of the sciatic muscles, should not the muscles of the whole leg be affected, and why should the wasting and other nerve derangements be localized as we find them, and we have to admit that the electric reaction of degeneration of the muscles is never present, which also is against the neurotic theory. Sciatica rarely, if ever, leads to permanent affections of the nerves and muscles. Many cases, moreover, are aggravated by too early massage, while careful massage and passive movements in the later stage are of the greatest value. The most important thing of all is the fact that in almost every case of sciatica there is lameness. The patient limps when walking, and this he thinks points to the existence of joint disease. There is little difference of opinion, however, as regards the proper treatment. Rest for the articulation is as applicable whether sciatica is of the nature of a neuritis or if the hip joint be the primary cause and antigout and antirheumatic remedies are recommended alike from both points of view.

8. **Appendicitis.**—Moullin points out that the abdominal viscera for the most part are insensitive to pain, and that in inflammation of the appendix the absence of pain is no indication that serious mischief is not occurring. The initial pain of appendicitis, which is commonly referred to the umbilicus, is due to the peristaltic action of the cecum or of the appendix

dragging on the attachment of the peritoneum to the abdominal wall, especially when the appendix is fixed by adhesions. The lessened severity of this initial pain without improvement in the general condition is due to cessation of peristalsis, owing to inflammations having spread to the muscular coat of bowel. The development of local pain, which as a rule precedes by some short time the cessation of umbilical pain, means that the inflammation has spread from the appendix to the parietal peritoneum or to the post-peritoneal cellular tissue, the only structures immediately concerned which are supplied with nerves capable of transmitting painful sensation. The absence of local pain means nothing, and he has more than once operated and found the appendix in a very bad condition, while the patient never had more than a twinge. Severe pain, however, is of serious import, as it implies either wide extent or great severity of inflammation. Deep and superficial tenderness are noted. Both may be present at once. In addition to the deep tenderness which usually exists, there is often a marked degree of cutaneous hyperesthesia, indicating that the corresponding spinal center is receiving from some part of the body unwonted stimuli, and in consequence is unduly sensitive to ordinary impressions. One point of very great importance is that the sudden cessation of this hyperesthesia without any corresponding improvement in the general symptoms, suggests gangrene and immediate operation.

9. **Stokes-Adams Disease.**—Osler's paper is a full account of the Stokes-Adams syndrome, illustrated by the histories of numerous cases and with special remarks on the peculiar characteristics of disease varieties—the post-febrile, arteriosclerotic, neurotic and senile types, special cardiac symptoms, etc. In the late forms the outlook is bad, though in young persons recovery and cure may be expected in a few cases. In such it might be advisable to try the remedies that may have an influence on the sclerosis, such as iodid of potassium in syphilis, and, with high tension, the nitrites. In senile cases with vertigo he thinks it is doubtful whether we can do more than keep the bowels open and regulate the diet. We have no remedy at our command which will accelerate a permanently slow pulse. A quiet, well-regulated life helps to ward off attacks of vertigo and syncope as in angina pectoris. In spite of the utmost care life may be a burden with the recurring seizures. For the syncopic attacks nitrite of amyl and strong ammonia may be used, and they may often prevent an attack if there is a warning. Brandy, ether and strong cardiac stimulants may be required to revive the patient in the protracted attack. The epileptiform and pseudo-apoplectic attacks may sometimes be prevented by posture. With signs of heart dilatation and many abortive systoles and infiltration of the bases of the lungs, digitalis may be cautiously tried.

12. **Aspirin in Chorea.**—This drug has been employed in 35 consecutive cases of chorea in outpatients at the Ancoats Hospital and the Manchester Royal Infirmary by Williamson, and the details of 8 cases are given. Among these 35 cases there were some of long duration where the symptoms proceeded unchanged, and every means had been tried without effect until this drug was given. In some mild cases very slight medication will sometimes help, and the fact of their doing well under aspirin is not so significant, but in the severe cases like those referred to, it seems of some importance. He can not regard it, he says, as a specific for chorea, but the results of its administration are so favorable as to indicate the probabilty of a beneficial action of the drug, and to suggest further observations.

13. **Amputation Under Hypnotism.**—See editorial, September 5.

Indian Medical Gazette, Calcutta.

August.

16 A New Field Service. C. Dooly and C. M. Thompson.
17 Red Water and Rinderpest in Cattle. Stewart Stockman.
18 Indian Milk Supply and Infective (Epidemic) Diarrhea. D. Simpson.
19 *Note on the Mycoid Body Found in the Blood Corpuscles in Remittent Fevers. (Continued.) W. Leonard Braddon.

19. **Remittent Fevers.**—Braddon holds that the mycoid bodies found in cases of remittent fever are not the relics of blood plates, but are true parasites, many of them containing masses exceeding that of the original enclosing red corpuscles. To what class of organisms they belong he thinks is uncertain. He suggests, however, from the hypha-like appearance of the filaments, their mobility at certain stages and their final apparent contraction recalling the true plasmodium of certain fungi, that their place may be among mycetozoa.

The Journal of Tropical Medicine, London.

August 15.

20 *Mosquitoes and Steamers. Andrew Balfour.
21 Eosinophilia Associated with Dracontiasis. Leonard S. Dudgeon and F. J. Child.
22 *Yellow Fever and Mosquitoes. Ivo Bandi.

20. **Mosquitoes in Steamers.**—Balfour calls attention to the fact that the bilge water of steamers is often swarming with the larvæ of mosquitoes, and that attention should be given to this fact. A ship-bred mosquito might very well pay a flying visit ashore and come back infected and spread the epidemic in its accustomed quarters.

22. **Yellow Fever and Mosquitoes.**—Bandi offers a criticism on the theory of yellow fever transmission by mosquitoes, calling attention to the fact that the *Stegomyia fasciata* is a day biter, and yet in Rio Janeiro those who pass the nights outside the infected limit escape the disease. If the *Stegomyia fasciata* were the sole transmitter of the disease it is difficult to see how spending the nights away from its haunts would secure an immunity.

Australasian Medical Gazette, Sydney.

July 20.

23 Mechanism of the Paroxysmal Neuroses. Francis Hare.
24 Address, South Australian Branch of British Medical Association. Arch. A. Hamilton.
25 Aphasia as a Result of Heat Exhaustion. R. E. Weigall.
26 Notes on a Case of Freyer's Prostatic Operation. Arthur T. Vallack.
27 Perineal Prostatectomy. H. L. Maitland.

Intercolonial Medical Journal of Australasia, Melbourne.

July 20.

28 The Medical Aspect of Hydatid Disease. Alfred A. Lendon.
29 The Surgical Aspect of Hydatid Disease. W. Moore.
30 General Considerations Concerning Tumors. H. B. Allen.
31 Carcinoma of the Tongue. G. A. Syme.
32 Disseminated Sclerosis in a Child. D. McM. Officer.

Bulletin de l'Academie de Med., Paris.

Last indexed page 397.

33 (No. 27, July 7.) *Presence of Foreign Bodies in the Nerve Cells. G. Marinesco (Bucharest).—Présence des corps étrangers (substances cristallines et microbes) dans les cellules nerveuses en rapport avec la théorie de l'amiboïsme nerveux.
34 (No. 28.) *The Tuning Fork in Medicine. Mignon (Nice).—L'usage du diapason en médecine.
35 (No. 29.) Kératite traumatique ulcéreuse compliquée d'iritis, traitée avec succès par la dionine. E. Tillot.
36 Firearm Wound in Left Rolandic Region. Nimier.—Coup de feu dans la région rolandique gauche avec hernie cérébrale; aphasie, hemi-contracture droite; extraction d'esquilles et reéducation motrice.
37 Comparative Study of Hygiene in the French Navy and Merchant Marine. Committee Report.—Progrès realisés à bord du cuirasse "Suffren," etc.

33. **Foreign Bodies in Nerve Cells.**—Marinesco found crystals in the nerve cells in the cadaver of a woman succumbing to a hemorrhagic meningitis. They responded to the tests for hematoidin. He has also discovered lepra bacilli in the nerve cells of the spinal ganglia. These phenomena might be accepted as evidences of ameboid movements on the part of the nerve cells, but Marinesco does not believe that this is the true explanation. He thinks that the hematoidin probably entered the cell in a saturated solution, and was precipitated in the form of crystals on encountering substances in the cell endowed with a catalytic action. He believes that bacilli may be swept into the nerves by the lymph stream. He has never discovered them in the cylinder-axes.

34. **The Tuning Fork in Medical Diagnosis.**—Mignon calls attention to the varying resonance of the internal organs and tissues transmitting the vibrations of a tuning fork applied to the skin above them. He uses the phonendoscope with the tuning fork and states that important information may thus be derived in examining the sinuses, lungs, skeleton and various organs.

Presse Medicale, Paris.

38 (No. 57.) Nouveaux cas de guérison de cancers par la cancroine de Professor Adamkiewicz. A. Renault.
39 *Les essais de leucothérapie dans les infections. M. Labbé.
40 Fermentation of Stools. A. Habel.—La fermentation des selles et sa valeur clinique dans quelques maladies.
41 (No. 58.) *Michel Clamps for Fastening the Permanent Catheter. P. Desfosses.—Fixation des sondes à demeure au moyen des agrafes Michel.
42 Kidney Stones in Gouty Subjects. E. Brissaud and M. Brécy.—Formation des depots uratiques spécialement dans les reins goutteux.
43 *Soluble Starch Test of Hyperchlorhydria. L. Meunier.—Diagnostique chimique de l'hyperchlorhydrie par la recherche des matières amylacées solubles.
44 *Technique de la resection du ganglion de Gasser par la voie du plan osseux spheno-temporal. E. Juvara (Jassy).
45 (No. 59.) Les origines de la médecine scientifique. L. MacAuliffe.
46 Les variations du coefficient nutritif cellulaire. J. Mitulesco (Bucharest).
47 *La splenectomie dans la maladie de Banti. J. Roger.
48 (No. 60.) Les ictères acholuriques. A. Gilbert and M. Herscher.
49 Exposé critique des résultats obtenus au sanatorium lyonnais d'Hauteville. F. Dumarest.
50 (No. 61.) *Leucoplasie et cancer. Du rôle et de l'importance de la biopsie. J. Darier.
51 Appendicite et Helminthiase. Cantas.
52 Occlusion intestinale et lithiase biliare. L. Weiller.
53 (No. 62.) *Reply to Darier above. E. Gaucher.
54 L'ictère grave dans la première enfance. C. Aubertin.
55 *Tests of Adulterated and Unhealthy Foods. H. Martel.—L'analyse des viandes insalubres et des produits carnés falsifiés.
56 (No. 63.) *Simple and Rapid Means of Purifying Drinking Water. Vaillard and Georges (Val-de-Grace).—Moyen pratique de rendre un eau potable.
57 Bone Marrow in Infections. K. S. De Graag.—La moelle osseuse et ses éléments dans l'infection staphylococcique chronique.
58 (No. 64.) The Statue of the Leper King of Cambogia. P. Desfosses.—Le roi lepreux.
59 *Usage et abus des médicaments dans le traitement des maladies chroniques. G. Hayem.
60 L'emploi du formol dans les colorations histologiques. C. Morel and Dalous.

39. **Attempts at Leuco-Therapy.**—Labbé reviews the various experimental work that has been done in the line of inducing hyperleucocytosis in animals as a protection against infection. He shows that the induced hyperleucocytosis, while theoretically a powerful means of aiding the natural defenses, is in practice able to confer a preventive protection only, and seems to be powerless against already established infection. At the same time, he adds, the hyperleucocytosis induced by nuclein—which is the substance that has been most generally employed—is possibly not intense enough for the desired purpose. It is not to be compared with the hyperleucocytosis induced by disease germs. When we have learned some more efficient means of inducing hyperleucocytosis in animals, it is possible that the results of this leuco-therapy may be applied to man with success.

41. **Michel Clamps for Fastening the Permanent Catheter.**—The little clamps or agrafes invented by Michel for suturing the skin are being used more and more in France and this country. The latest use to which they have been applied is to hold the permanent catheter in place, a thread around the catheter being tied to one of the clamps stuck into the skin.

43. **Chemical Diagnosis of Hyperchlorhydria.**—Meunier announces that the determination of the total acidity and of the free hydrochloric acid is not sufficient to diagnose with certainty a hyperchlorhydric gastric juice. In 20 cases he found that the soluble substances derived from starch after an Ewald test meal varied from 4 to 8 gm., while in 15 normal subjects the amount of these substances ranged from 20 to 88 gm. He thinks it is evident that the power of digestion possessed by the mucosa is of more import than its secreting power. He does not classify a gastric juice as hyperchlorhydric unless after an Ewald test meal it contains less than 10 gm. per 1,000 c.c. of sugars reducing Fehling's solution. Or to state it still more precisely, unless it contains in solution soluble substances derived from the starch, which after transformation into dextrose show a lesser amount of the latter than 20 gm. per 1,000 c.c. Determination of hyperchlorhydria on this basis not only confirms the diagnosis but indicates the proper dietary.

44. **Technic of Gasserectomy.**—Juvara illustrates with numerous cuts the various steps of gasserectomy by the spheno-temporal bone plane route, with the eight instruments required. He performed it recently on a patient with intractable trifacial neuralgia, after numerous experiments on the cadaver. The technic differs very slightly from that followed by Quénu, Sébillot and Poirier.

47. **Splenectomy in Banti's Disease.**—Roger reports 2 cases and emphasizes the fine results that may be obtained from this measure even in advanced cases of this syndrome, which includes enormous hypertrophy of the spleen, hypertrophy of the liver, ascites and low hemoglobin rate. (The untimely death of Dr. Roger was chronicled last week.)

50 and 53. **Excision for Diagnosis in Leucoplasia.**—Gaucher insists on the danger and uselessness of this measure in case of cancer of the tongue. He believes that it is liable to entail a terrible exacerbation of the lesion. Diagnosis is easy without it, he claims. Epithelioma is an isolated, single tumor. In sclerosis, if the ulceration is single, there are other protuberances and multiple fissures. Both sclerosis and gumma, he states, are always located on the upper surface of the tongue, while cancer sometimes occurs on the under surface. Epithelioma forms a harder, more hemorrhagic ulceration; there is a fetid exudation, and the pain, salivation and interference with movements are much more marked than in case of ulcerative sclerosis, while the glands never become enlarged with mere sclerosis or gumma.

55. **Tests of Foods.**—Martel concludes his review of the technic for detecting adulterated and unhealthy foods, with a description of the biologic blood test applied to the differentiation of horse meat from other meats. The precipitating reaction is absolutely specific for pork, horse meat and dog flesh, but beef and mutton may respond indifferently to the test.

56. **Simple and Rapid Means of Purifying Drinking Water.**—Vaillard and Georges utilize iodin as an efficient means to destroy disease germs in the water. They neutralize it afterward with sodium hyposulphite, which combines with the iodin to form sodium iodid, which is harmless, even in much larger amounts than are required for the sterilization. According to the technic they recommend, the chemicals are put up in the form of three colored tablets. The formula for the first is as follows: dry potassium iodid, 10 gm.; dry sodium iodate, 1.560 gm., colored with methylene blue. Tablet No. 2 contains only 10 gm. tartaric acid colored with sulpho-fuchsin, and tablet No. 3 merely sodium hyposulphite, 11.6 gm. Each of the formulas makes 100 tablets. The sodium iodate gives up its iodin in contact with slightly acidulated water and the potassium iodid maintains the nascent iodin in solution. A blue and a red tablet are dissolved in a quart of water, stirring well. The water turns a brownish yellow. This mixture is then poured into the 10-liter vessel full of the water to be purified, which turns yellow. After waiting ten minutes, dissolve the white (hyposulphite) tablet in another quart of water and pour this also into the large vessel. The water loses its yellow tinge at once and becomes limpid and is ready to drink without further delay.

59. **Medication in Chronic Disease.**—Hayem thinks that medicines frequently prevent the benefit that might otherwise be obtained from hygienic and dietetic measures in chronic diseases, especially in tuberculosis. The digestive tract must be spared every source of irritation or fatigue. In his experience the suppression of all medication has frequently abolished all tendency to gastric crises in tabes. He is even inclined to admit that medicinal intoxication is the habitual cause of the nervous forms of chronic affections and possibly also of the nutritional disturbances, cases of cancer excepted.

Semaine Medicale, Paris.

61 (XXIII, No. 29.) *La thérapeutique "in extremis." F. Lejars.
62 Traitement des rétentions rénales par la distension de la vessie (of the bladder). O. Pasteau.
63 Photothérapie des fluxions dentaires. A. Hellion.
64 *Le sérum de Trunecek contre la sclérose de l'oreille et le labyrinthisme. E. Sari.
65 (No. 30.) Les phénomènes de sténose dans les ulcérations tuberculeuses de l'intestin. L. Bard.

66 Letter from America. Surgery of the Stomach in the United States. F. Munch.—La chirurgie de l'estomac aux E. U.
67 Emploi de l'adrénaline contre les hemorrhoides. D. Devilliers.
68 (No. 31.) The Information Bureau for Strangers at Paris.—Création à l'Université de Paris d'un bureau de renseignements scientifiques pour les étrangers.
69 (No. 32.) La sténose du pylore chez les nourrissons (in nurslings). L. Chelnisse (Montpellier).
70 Report of French Congress of Alienists and Neurologists, Brussels, August 1-8. (Commenced in No. 31.) (Fuller Report in *Progrès Medical.*)
71 Letter from America. Prophylaxis of Yellow Fever. F. Munch.—La défense contre la fièvre jaune sur le golfe de Mexique.

61. **Therapeutics in Extremis.**—Lejars regards saline infusion as the most efficient weapon at our disposal when death seems imminent. He relates 2 cases in which after actual bleeding to death warm saline infusion was able to bring back a slight color to the lips, the heart began to beat after ten minutes' arrest, the respiration was gradually re-established, consciousness returned and the patient survived twenty-four hours. In both of these cases death was due to the loss of the vital fluid, the vessels, being empty, were unable to act, but when filled with the saline solution they resumed their function, and if the patients had had a little more vitality left, they could have been saved. De Ott has demonstrated that regeneration of the blood occurs twice as rapidly under the influence of saline infusion as of transfusion of blood. Lejars believes in operating in cases of peritonitis, etc., even when the patient is apparently in extremis, and reports several cases in which the most unexpected success was realized. In one of umbilical pseudo-strangulation with eight days of stercoremic intoxication, the skin marbled with purple, the extremities cold, with regurgitation of fecal matters, the hernia enormous, red and tense, he operated under cocain, sustained by the fact that the breath did not have agonal fetidity and that the pulse, although small, was still perceptible. The patient made a smooth recovery. Progressive depression, irregularity of the heart action and anuria are important indices and also the cyanosis and pronounced hypothermia which indicate that the bulbar centers are poisoned beyond relief by the bacterial toxins. The toxic impregnation at this stage is too advanced for any intervention to have a chance of success, but there is always a chance until this point is reached. Operations in these advanced stages of septicemia, peritonitis, etc., must be simple, short, and be done without general anesthesia. The heart must be guarded above all. Here, again, saline solution by rectum or subcutaneously is the sovereign resource. If the serum does not induce diuresis it is because the kidneys are already fatally compromised and the end could not have been averted. The absence of diuresis thus becomes a valuable sign for the prognosis.

64. **Trunecek's Serum in Ear Affections.**—In a thesis recently presented at Paris Sari describes 16 cases of sclerosis of the middle ear, the labyrinth syndrome or sclerous otitis, treated by subcutaneous injection of Trunecek's serum every second day, the amount varying from 1 to 6 c.c. The symptoms due to the labyrinth (vertigo, sounds in the ear or deafness), were rapidly improved or cured by a small amount of the serum, and transient or permanent success was also obtained in cases of sclerosis of the cavity of the tympanum or labyrinth. On the other hand, those with sclerosis and adhesions consecutive to suppuration were not only not benefited, but in some the symptoms were aggravated by this treatment. The formula for the serum was given in THE JOURNAL, xl, page 874.

Archiv f. Verdauungskrankheiten, Boas', Berlin.

Last indexed XL, page 1174.

72 (IX, No. 2.) *Ueber das Distomum spathulatum (Leuckart). Z. Inouye (Chiba, Japan).
73 Zur Klinik der Achylia gastrica und der perniciösen Anämie. Max Einhorn (New York).
74 Fall von epiphrenalem Divertikel des Esophagus. B. Olivetti.
75 *Rektal-Stenose und Parametritis. A. Müller (Munich).
76 (No. 3.) *Verwertung der Erlich'schen Dimethylamidobenzaldehyd-Reaktion für eine quantitative Indol-Probe in den Feces, nebst Untersuchungen über die Eiweissfäulniss im Darme. R. Baumstark (Hamburg).
77 *Zur Methodik des Albumosen-Nachweises in den Feces. H. Ury (Charlottenburg).
78 Digestion of Fat in Stomach. Z. Inouye (Würzburg).—Fettverdauung im Magen.
79 *Sahli's Test of Stomach Contents. E. Zweig and A. Calvo.—Die Sahli'sche Magenhaltuntersuchung und ihre Bedeutung für die Diagnose der alimentären Hypersekretion.

72. **Distomiasis.**—Inouye reports that in his examination of subjects in various regions of Japan he found eggs of this parasite in from 19 to 71.9 per cent. of the feces examined, the number of subjects in each locality thus examined ranging from 47 to 725. About 71.8 per cent. of his 2,460 patients with distomiasis were males. Regions most affected are those where malaria also prevails. He reviews the symptoms, etc., remarking that treatment can be only symptomatic. Antiparasitic drugs have proved useless. In prophylaxis he warns against drinking or swimming in canal water or eating raw fish or mussels. In one region the mortality from this source has been reduced to zero by such precautions.

75. **Rectal Stenosis and Parametritis.**—Mueller reiterates his former assertions in regard to the frequent causal combination of these affections, the second being secondary to the first. He points out that the sacro-uterine ligaments embrace the rectum, and every inflammation of the latter, especially chronic ones, shorten and stiffen these ligaments. This reacts on the intestine, which becomes constricted, kinked and forced against the sacrum. The uterus may be drawn out of position likewise. He thinks that this rectal origin of gynecologic affections is more common than the gonorrheal, and frequently dates from early life. Childbearing may serve as a vigorous massage to aggravate or relieve the condition. In the former case, the pregnancy is usually regarded as the primary cause. In diagnosing gynecologic affections it is wise, therefore, to test the elasticity of these ligaments, and seek for traces of inflammation in them and in the rectum. Infection of the vicinity from the constricted and possibly ulcerated bowel is more than probable. The hardened ligaments must be softened by warm irrigations, sitz baths and cataplasms, and when loosened, their elasticity must be restored by stretching, and the stenosis combated by massage. Pessary treatment later will promote the restoration of elasticity, but should not be commenced until the inflammatory stage is past.

76. **Ehrlich's Indol Test.**—Baumstark applies the dimethylamido-benzaldehyd test by an original method, which he calls the "extinction method." It consists in diluting and examining the solution of indol after applying the test, comparing it with a control solution until the band in the spectrum characteristic for the mixture vanishes. The indol mixture gives a well-defined band in the spectrum between D and E, commencing at the former, and skatol gives two bands, one at this point and one between C and D. Solutions of various concentration give, of course, bands of varying distinctness, until the dilution reaches a point when the bands are no longer visible. He found that solutions of indol and skatol after applying the reagent rapidly change color. He does not attempt to use an instrument of precision, but finds the pocket spectroscope perfectly adapted for the purpose. He tabulates the findings in applying the test thus modified on various subjects, and extols in high terms the value of this new method of quantitative investigation of the indol. The test is simple, easy, takes very little time, and places in the hands of the internist a method of determining the absolute amount of indol in the feces and urine. In estimating the total putrefaction of albumin in the intestines, the indican and ethereal sulphates in the urine and the indol in the feces must all be determined. He states that in cases of obstipation, achylia, hyperchlorhydria, pernicious anemia and chlorosis the indol was increased to a moderate or extreme extent in his experience, while it was reduced in diarrhea and in one case of achylia. Certain cases exhibiting severe symptoms showed an enormously increased proportion of indol in the urine, while in the feces it was reduced. Such contrasts as these have hitherto escaped observation. As it is impossible to assume increased absorption in these cases, owing to the seriously compromised condition, the explanation must be the loss of the normal oxidizing power for the products of putrefaction that are absorbed. His experience also establishes that the disturbances in the digestive tract coexisting with achylia and hyperchlorhydria are liable to have an unfavorable influence on the putre-

faction of albumin, although it is impossible to ascribe to the hydrochloric acid any direct disinfecting power beyond the confines of the stomach.

77. **Determination of Albumose in Feces.**—Ury emphasizes the necessity of extracting the substances in the feces which mask the biuret reaction before attempting to determine the albumose. Besides the urobilin, there is a brown pigment which must be eliminated. It is necessary also to extract the substances which respond, themselves, to the biuret test. This includes both urobilin and nucleoproteid and remains of casein. The albumin in solution in diarrheic stools must also be eliminated.

79. **The Sahli Test of Stomach Functions.**—THE JOURNAL has described Sahli's "flour soup" test as a means of determining the state of the gastric functions. (See xxxviii, page 1477.) The present article reports experiences with it in a Vienna clinic. The writers have become convinced that it is too complicated for general use in practice, but that in cases of nervous dyspepsia it may prove of great value. It is especially useful in differentiating atony from alimentary hypersecretion, which it accomplishes with an exactness hitherto unattainable.

Centralblatt f. Bakteriologie, etc., Jena.

Last indexed page 401.

80 (No. 7.) Leproid Affection in Rats. W. K. Stefansky (Odessa).—Eine lepra-ähnliche Erkrankung der Haut und der Lymphdrüsen bei Wanderratten.
81 Ein neuer pathogener Mikrobe zur Gruppe der Diphtherie-Bacillen gehörig: Bacterium muris. E. Klein (London).
82 Length of Life of Typhoid Bacilli Voided in Stools. E. Levy and H. Kayser (Strasburg).—Ueber den Lebensdauer von Typhusbacillen die im Stuhle entleert wurden.
83 Zur Frage der morph. und biol. Charakterisierung des Meningococcus intracellularis. H. Albrecht and A. Ghon.
84 Ueber die literarischen Schicksale des Diplococcus intracellularis meningitide und seine etiologische Bedeutung. A. Weichselbaum (Vienna).
85 3 neue Taenien aus Ceylon. V. Linstow.
86 *Ueber die Bereitung eines antibakteriellen Diphtherie-Serums. Sein prophylaktischer und Heil-Werth. I. Bandi (Sao Paulo, Brazil).
87 Ueber die Specifität der Sero-Diagnostik der Tuberculose. P. Eisenberg and E. Ketter (Paltauf's clinic, Vienna). Conclusions negative.
88 Test of Steam Sterilization Before the Class. C. Eijkman (Utrecht).—Ein Vorlesungsversuch auf dem Gebiete der Dampfsterilisation.
89 Ueber den Desinfections-Werth einiger Formaldehyd-Präparationen. K. Kokubo (Göttingen).
90 Flagella Staining. G. de Rossi (Pisa).—Geisselnfärbung.
91 (No. 8.) Cutaneous Affection of Rats Induced by Acid-Resisting Bacteria. Lydia Rabinowitch.—Ueber eine durch säurefeste Bakterien hervorgerufene Hauterkrankung der Ratten.
92 Study of Virulence of Tubercle Bacilli. E. Krompecher and K. Zimmermann.—Untersuchungen über die Virulenz der aus verschiedener tub. Herden des Menschen reingezüchteten Tuberkel-Bacillen.
93 Immunity to Anthrax. O. Bail (Prague).—Untersuchungen über naturelle und künstliche Milzbranimmunität. (Commenced in No. 5.)
94 Natural Immunity to Anthrax of Dogs and Fowls. A. Petterson (Stockholm).—Ueber die naturelle Milzbrandimmunität des Hundes und des Huhnes.
95 Successful Treatment of Otherwise Fatal Intraperitoneal Streptococcus Infection of Rabbits by Preventive Injections of Pyocyanose-Immun-Proteidin. R. Emmerich and R. Frommsdorff.—Ueber die erfolgreiche Behandlung, etc.
96 *Production of a Bacterial Preparation from Cultures of Tubercle Bacilli. G. Marpmann.—Ueber die Herstellung eines Bakterien-Präparates aus Kulturen von Tub.-Bacillen.
97 Lysoform, Bacillol und Sublamin in wässriger Lösung als Hände-Disinficienten nach Vorbehandlung der Hände mit Alkohol. Engels (Marburg).
98 Die Differential-Diagnose des Typhus-Bacillus vom B. coli auf Grund der Säurebildung (on basis of acid formation). A. Wolff (Königsberg).
99 Züchtung der Trichophytopilze *in situ*. K. Hollborn (Leipsic).
100 Stainability of Streptothrix by Tubercle-Bacilli Technic. E. Fuchs (Prague).—Ueber Färbbarkeit der Streptotrichen nach Methoden der Tub.-Bac.-Farbung.

86. **Anti-Bacterial Diphtheria Serum.**—Bandi believes he has established that the specific bacterial agglutinins of a serum must be regarded as true bactericidal substances. The degree of the agglutination and "sensibilization" is, therefore, the index of the bacterio-toxic action of a specific serum *in vitro*. The specific agglutinating power parallels the phases of the immunizing process against the bacteria, as likewise the sensibilizing power. Tests of the standard diphtheria antitoxin from Paris, Berne and Brussels failed to show any of these specific agglutinating and sensibilizing properties. Bandi reports success in the clinic with an antidiphtheria serum produced with a view to secure as much as possible of these properties. He adds a specific antitoxic serum to cultures of the diphtheria bacilli. The bacilli take up from the serum the substances which are specifically toxic for them. The serum is then centrifugalized out of the culture, and the bacilli thus "sensibilized," as he calls it, are injected into a goat in amounts which would be fatal if they had not been thus previously sensibilized. The injections cause intense phagocytosis and the serum of the animals acquires pronounced specific agglutinating and sensibilizing properties. It has very little antitoxic action, but it is rich in antibodies and has remarkable curative effects. He suggests that a combination of this serum with ordinary antidiphtheria antitoxin might prove useful in practice. His researches were conducted at the Brazilian National Institute of Bacteriology, and he reports in detail 2 out of the 7 cases treated on these principles. The results were so fine that he did not consider it necessary to wait for further experience.

96. **Therapeutic Preparation of Bacteria.**—Marpmann cultivates the tubercle bacilli in milk to procure the specific substances which the bacilli elaborate, and he then administers them by the mouth to tuberculous patients. He gives a cut of the apparatus he has devised for the purpose to allow a constant circulation of air and current in the milk, which becomes entirely impregnated with the bacterial cultures. They are then transferred to a medium, of which he gives the formula, and the bacilli and medium are frozen together, ground and mixed with alcohol. Five drops of the fluid thus obtained are given to the patients three times a day. A number of practitioners are now testing this remedy in their practice, and the results will soon be published in detail.

Deutsche Med. Wochenschrift, Berlin and Leipsic.

101 (XXIX, No. 30.) *Untersuchungen über die bakteriologische Cholera-Diagnostik und Spezificität des Koch'schen Cholera-Vibrio. W. Kolle, E. Gotschlich and others.
102 *Klinisch-hämatologische Mitteilungen. III. Zur Kenntniss der myelogenen Tumoren. E. Bloch.
103 Casuistic Study of Vascular Affections on Nervous Basis. T. L. v. Criegern (Kiel).—Zur Kenntniss der Erkrankungen des Gefässsystems, welche vermuthlich auf nervoser Grundlage entstehen.
104 *Diabetes und Hautkrankheiten (cutaneous affections). E. Saalfeld.
105 (No. 31.) *Beitrag zur Behandlung der Ankylostomiasis. Nagel (Bochum).
106 *Zur Diagnose des Carcinoma ventriculi. H. Salomon (v. Noorden's clinic, Frankfurt a. M.).
107 Ueber Thrombosen und Embolien bei akuter Perityphlitis. Middeldorpf.
108 Zur Pathologie der Hautverbrennungen (burns). G. Scagliosi (Palermo).
109 Study of Percussion of Apex and Spine. B. Alexander.—Ueber die Krönig'schen Schallfelder bei der Lungenspitzen-Tuberkulose und über den Perkussions-Schall der Wirbelsäule.
109½ *Strychnin bei Poliurie und Diabetes insipidus. L. Feilchenfeld.
110 Appeal for Foundation of International Congresses for School Hygiene.—Aufruf, etc.
111 (No. 32.) *Zum klinischen Nachweis des Urobilin. W. Schlesinger.
112 Zur Frage der alimentaren Levulosurie bei Leberkrankheiten. G. Landsberg.
113 Zur Colopexie bei Prolapsus recti (die extraperitoneale Fixation des Darmes). J. Rotter.
114 Abdominal Hysterectomy Plus Vaginectomy for Cancer. W. Heidemann.—Die radikale Entfernung der krebsigen Gebärmutter und Scheide auf abdominalem Wege.
115 Zur Radikal-Operation der Leistenbrüche (of inguinal hernia). T. Honda (Tokio).
116 Zur mikroskopischen Technik. E. Neuhaus.
117 Susceptibility of Useful Mammals for the Tsetse-fly Disease. E. Martino.—Ueber die Empfänglichkeit nützbarer Säugethiere für die Tsetsekrankheit.
118 Einiges von der Anatomie der Araber und der Griechen. M. Simon (Kiel).
119 Thorax-Gurtel (girdle). C. Huetlin (Freiburg i. B.).
120 (No. 33.) *Life-maintaining Action of Stimulus. A. Schücking (Pyrmont).—Ueber die lebenserhaltende Wirkung des Reizes.
121 *Stain Differentiation of Blood Plates. K. Preisich and P. Heim (Budapest).—Durch Färbung lebhaft differenzirte Blutplättchen.
122 The Heidelberg University Centennial. C. Magenau.—Geschichtlicher Rückblick, etc.

101. **Diagnosis of Cholera.**—Kolle remarks that genuine Koch cholera vibriones were found in 59 out of 73 cases of cholera examined last year in Egypt. In 14 the micro-organisms derived differed from them, and possibly the diagnosis may have been erroneous in some. The agglutination test proved again its specificity in more than 1,000 tests with

various combinations of germs and serum made with the true and the false cholera vibriones. He advises eight hours of "peptone water pre-culture" and eight hours of agar plate culture, the agglutination studied in the hanging drop with 80 magnifying power, dilution 1 to 1,000. This allows an exact diagnosis in sixteen hours.

102. **Myelogenic Tumors.**—Bloch relates a case in detail which establishes that it may be possible by examination of the blood to diagnose a myelogenic tumor before any characteristic symptoms have developed. The patient was a man of 41, presenting symptoms suspicious of a neoplasm in the spine. The abundance of myelocytes found in the blood indicated that the bone marrow was under the influence of some irritation. The spleen was unusually large and soft, and there was fever. The necropsy revealed a spindle-celled sarcoma originating in the vertebræ. Bloch describes several other cases with unusual and interesting blood findings.

104. **Diabetes and Cutaneous Affections.**—Saalfeld's experience emphasizes the importance of combining both general and local treatment in case of this association of diabetes and skin disease. In 2 instances the latter developed first as a premonitory symptom of the diabetes. One was a case of acne necrotisans corporis, the other pruritus scroti. He found that ordinary skin diseases in diabetics, rebellious to the usual measures, yielded to them after constitutional treatment had been instituted. He had this experience in several cases of eczema, pediculosis pubis, acne rosacea, lichen ruber, ulcus molle, ulcus cruris, etc. When these affections proved intractable he found that change to an antidiabetic diet was soon followed by a cure of the skin lesions. This was also peculiarly his experience with pruritus, and to such an extent that he now examines the urine as a routine measure in every case from the start. He never found glycosuria associated with psoriasis or leucoplakia oris, but mentions that neuralgic pains were exceptionally severe in his diabetic patients.

105. **Treatment of Ankylostomiasis.**—Nagel practices at Bochum, a hotbed for this affection; 4,000 patients have been treated in the hospital since '96. Kraft has been able to isolate from ext. filicis a non-toxic essential principle which Nagel believes to be the true effective worm-expelling element. He calls it "filmaron" and reports that it is proving in the clinic all that had been anticipated for it, succeeding in 9 cases after failure of extractum filicis. His experience suggests that the male fern does not kill the worm but merely benumbs it, and that the following purgative is the real expelling force. Ankylostomiasis is spreading in the mines of the region as the miners know of cases of sudden blindness that have followed treatment, and shrink from applying to a physician. Nagel himself has observed 2 such cases, the robust men becoming totally blind after ingestion of 10 gm. of extractum filicis in one or two doses. The discovery of the non-toxic, effective element in the drug, therefore, is of great importance.

106. **Albumin Test in Diagnosis of Cancer of Stomach.**—Salomon's test is based on the exudation of serum from any cut or ulcerating surface. He prepares the patient for the test by giving fluid food only, free from albumin, such as coffee, wine, bouillon, tea, the day beforehand. At 9 p. m. the stomach is rinsed until the rinsing water returns clear, and the patient is warned not to eat anything more. The next morning 400 c.c. of normal salt solution is poured into the stomach and then siphoned out and poured in again and siphoned out once more, to give the stomach as thorough a rinsing as possible. The siphoned-out fluid is then tested for nitrogen by the Kjehldahl method, and the Esbach test for albumin applied. He reports experiences with 22 patients, which showed that the Esbach test was negative in 6 cases of gastric catarrh, or only faintly positive; absolutely negative in 5 of nervous dyspepsia, and negative or faintly positive in cases of other gastric affections, with the exception of cancer. In 8 cases of carcinoma of the stomach the Esbach findings were decidedly positive, showing the presence of 1/16 to 1/2 per 1,000 of albumin in every case. He thinks that a negative reaction may aid in excluding cancer in dubious cases, to say the least, and that a marked positive reaction under certain restrictions may confirm the diagnosis. The nitrogen was also more abundant in the cancer cases, ranging from 10 to 70 mg. in 100 c.c. of fluid. When the siphoned-out fluid shows a flaky turbidness or the nitrogen is over 20 mg. in 100 c.c., cancer may be suspected.

109½. **Reduction of Polyuria by Strychnin Hypodermically.**—Feilchenfeld announces that a daily injection of .005 gm. strychnin nitrate proved effectual in reducing the amount of urine in a severe case of polyuria and one of diabetes insipidus in his experience. The urine dropped from 3,200 gm. to 1,400. The specific gravity does not seem to be altered, and this, with the promptness of the response, impels him to ascribe the action of strychnin in these cases to an influence on the central nervous system.

111. **Clinical Tests for Urobilin.**—Schlesinger reports from Nothnagel's clinic that it is possible to obtain fluorescence from urobilin in urine and distinct bands in the spectrum if an equal amount of a 10 per cent. alcoholic solution of zinc acetate is added to the urine and the precipitate filtered out. Usually this fluorescence and the spectrum bands are masked by the presence and action of other pigments, but by this procedure even a very small proportion of urobilin with large proportions of the other pigments responds perfectly to the test. Hemoglobin disturbs the reaction and the technic must be modified for blood. For this he measures 1.5 c.c. of a .7 per cent. saline solution and adds enough potassium oxalate so that when the same amount of blood is added a 1 per 1,000 solution of the oxalate results (.5 potassium oxalate to 200 saline solution), then adding 1.5 c.c. blood drawn fresh from the finger. The oxalate prevents the coagulation of the blood without disturbing the reaction. The tube is then centrifugalized, the clear fluid decanted and poured into the same amount of the alcoholic zinc acetate and centrifugalized again. The supernatant fluid is then examined for fluorescence and the spectrum bands.

120. **Life-Maintaining Action of Stimulus.**—Schücking, in continuing his researches on the eggs of the starfish and other echinoderms, has found that stimuli of various kinds are able to confer greater resisting power on the cell, enabling it to survive the action of substances which destroy the control cells. The shriveling of the living protoplasm in hyperisotonic solutions he believes to be a process independent of osmosis, a reaction of the living substance. He has become convinced that the cell is able to regulate its intake and outgo of water independently of the osmotic differences of normal metabolism. His experiments with chemical, electric, mechanical and other stimuli are described in detail.

121. **Stain Differentiation of Blood-Plates.**—Preisich and Heim exhibited at the meeting of the local medical society, March 28, a number of stained specimens of blood-plates which show them up in a new light. They followed the Romanowski technic, slightly modified, and claim to have established with it that the blood-plates are nucleated formations of the red corpuscles thrown out by the latter into the circulating blood. They frequently found the red-stained blood-plates inside the blue-stained red corpuscles. In morbid processes accompanied by much regeneration of the red corpuscles, the number of blood-plates was correspondingly increased, while it was low in pernicious anemia. They also found blood-plates occasionally inside the phagocytes. The granulations of the latter may be merely the granulations left from phagocyted blood-plates. In size, staining reaction and other points they seem to be identical with the granulations of the blood-plates.

Muenchener Med. Wochenschrift, Munich.

123 (L. No. 29.) Physiologic Bases of Iodipin Treatment. H. Winternitz (Halle).
124 Das kolloidale Bismut-Oxyd bei den Verdauungsstörungen im Säuglingsalter (digestive disturbances in infancy). Kinner.
125 Zur Kasuistik der essentiellen Nierenblutung (renal hemorrhage). P. Wulff.
126 Rubber Gloves. A. Hammesfahr.—Die Gummihandschuhe bei aseptischen Operationen.
127 Toxin and Antitoxin. Max Gruber and v. Pirquet. (Commenced in No. 28.)
128 Fat Substance of Yeast in Therapeutics. E. Roos and O. Hinsburg.—Eine therap. wirksame Substanz aus der Hefe. Cerolin, Fettsubstanz der Hefe.

129 (No. 30.) *Ueber Albuminurie bei Aorten-Klappen-Insuffizienz. W. v. Leube (Würzburg).
130 Study of Intussusception. H. Schridde.—Eine nach Ausstossung des Intussuszeptums spontan geheilte Invagination des Ileums. Zugleich ein Beitrag zur Frage der Entstehung und Entwicklung der Intussuszeption.
131 Monocular Predominance in Binocular Vision. O. Rosenbach. —Ueber monok. Vorherrschaft beim binok. Sehen.
132 Eine neue Bäderform in Bad Nauheim. T. Groedel II.
133 *Eine neue Operation zur Behandlung veralteter Kniescheibenbrüche (of old fractures of patella). A. Schanz.
134 Adrenalin gegen Darm-Blutung bei Typhus. Graeser.
135 Study of Intestinal Origin of Tuberculosis. E. Nebelthau. (Commenced in No. 29.)
136 (No. 31.) *Frequency of Joint Affections in Hereditary Syphilis. E. v. Hippel.—Ueber die Häufigkeit von Gelenkerkrankungen bei hereditär Syphilitischen.
137 *Zur hereditären Spatsyphilis (tardy syphilis). Jordan (Heidelberg).
138 *Study of Inheritance of Syphilis. v. Düring.—Einige Fragen aus der Lehre von der Vererbung der Syphilis.
139 Pyrogallic Acid in Lupus of Nasal Mucosa. Wittmaack (Breslau).—Behandlung des Schleimhautlupus der Nase mit Pyrogallussaure.
140 *Outlining Heart Limits with the Phonendoscope. F. Moritz. —Ueber die Bestimmung der Herzgrenzen nach Smith mittels des Phonendoskopes.
141 *Zur Aetiologie der Gastritis phlegmonosa. C. Klieneberger.
142 *Ueber gonorrhoisch-metastatische Entzündung der Augen Erwachsener (eye affections in adults). W. Apetz (Würzburg).
143 *Killing of Tubercle Bacilli in Heated Milk. W. Rullmann.—Ueber die Abtötung von Tub.-Bazillen in erhitzter Milch.
144 Five Grandmothers Who Nurse Their Grandchildren. F. Siegert (Strasburg).—Grossmütter, die ihre Enkel stillen.
145 Ein neues Pupillometer. Bumke (Freiburg a. B.).
146 Eine Irrigator-Spritze (syringe). F. Kuhn (Cassel).
147 Zur Kenntnis der Landry'schen Paralyse. Rolly (Leipsic). (Commenced in No. 30.)

129. **Albuminuria with Insufficiency of Aortic Valve.**—A young man with the clinical picture of insufficiency of the semilunar valves, exhibited likewise symptoms of connective tissue induration of the kidneys. The necropsy showed similar induration in liver and spleen, while the lungs were exempt. The case demonstrates that in case of insufficiency of the aortic valves, albuminuria may be observed, not only as an expression of venous congestion in the kidneys, long before any other signs of this congestion are apparent, but also as a manifestation of general atheromatosis in its most restricted sense —the same affection which develops primarily in elderly subjects, but which in these conditions is the direct result of the valvular affection. The maximal increase in the blood pressure and its fluctuations in the vessels and capillaries in the kidneys, entail a thickening of their walls and a proliferation of connective tissue in their vicinity. The induration in the kidney may be regarded as arterial induration in contrast to cyanotic induration. As the circulation in the organ suffers, albumin and later even tube casts may be found in the urine. The date of the appearance of the induration and albuminuria depends on the intensity and duration of the valvular affection.

133. **Transplantation of Sartorius in Old Fractures of Patella.**—Schanz has treated a case of old fracture of the patella with an unsurmountable gap, by digging a continuous groove in both fragments and transplanting into this groove the isolated sartorius muscle, suturing it in place with wire. He asserts that by this method it is possible to restore function to old fractured patellas, no matter how wide the gap. If there is the slightest tendency to the formation of a fibrous callus the joint need not be opened at all. Another advantage of the measure is that the quadriceps is strengthened and the disposition to atrophy averted.

136. **Joint Affections in Hereditary Syphilis.**—Hippel affirms that joint affections are frequent in hereditary syphilis, and especially among those subjects who were not treated with mercury in childhood. Hence they are often observed in subjects presenting keratitis, as these are mainly recruited from this class. In 56 per cent. of 77 patients with syphilitic keratitis in his practice since 1885, he was able to discover some joint affection, and in nearly every instance it had preceded the ocular affection. In several cases its syphilitic nature had been unsuspected, and it had been treated by eminent surgeons on some other basis. The functional disturbance was generally slight, and only in a few instances was the subject confined to bed. The knee was almost invariably the joint affected, sometimes accompanied by swelling of the elbow, wrist or finger joints. The prompt benefit derived from potassium iodid differentiates these cases. He examined a number of non-syphilitic eye patients and found that joint affections were rare among them, while in his total of 85 cases of keratitis in syphilitics, the joints were or had been affected in 47. The joint affection is usually merely a serous or sero-fibrinous effusion in the knee, bilateral, without preceding trauma and generally without fever: causes remarkably slight subjective disturbances and usually heals in time without permanent functional derangement.

137. **Tardy Hereditary Syphilis.**—Jordan publishes an account of a case of tardy congenital lues in a young soldier, localized solely in the knees. The success of treatment confirmed his diagnosis of miliary gummata in the synovialis. He adds a second case, a child with a gonitis proceeding from the knee joint and associated with keratitis parenchymatosa. He adds that in all cases of mild bilateral knee affections in children or adults a dubious diagnosis may be cleared up by instituting specific treatment. It must be energetic and long continued to effect a cure in these hereditary cases.

138. **Inheritance of Syphilis.**—It is possible, von Düring reasons, that syphilitic infection may occur and its manifestations remain limited for a time to interstitial inflammation of the internal organs, escaping our diagnosis. Such a latent syphilis would explain the cases of tardy hereditary syphilis and also the syphilis of apparently sound mothers of children with hereditary syphilis. Matzenauer believes that the mother of every child that proves to have an inheritance of syphilis must herself be infected, and should receive specific treatment irrespective of the apparent soundness of her health. He rejects the idea of spermatic infection, and thinks that if the placenta is sound the children will be free from syphilis. These views require confirmation, and it is important that family physicians should aid specialists in this research, following for years both mothers and children in these puzzling cases. Examination of the placenta is particularly important from this point of view, and study to determine the specific alterations in the placenta, and whether it is possible that the fetal or maternal portion might be alone involved. For the present the burning question is as to whether the apparently healthy mothers of syphilitic children are actually sound or are they infected.

140. **Outlining the Heart with the Phonendoscope.**—Moritz has repeated Smith's examination of the heart with the phonendoscope, but his findings do not agree with those obtained by Smith. He gives numerous cuts to show that it is physically impossible for the latter to be correct.

141. **Etiology of Gastritis Phlegmonosa.**—Gastritis phlegmonosa occurs most frequently in men, and besides excesses, trauma, intoxication and irritating food as the cause, it may be due to the invasion of the submucosa of the stomach by pus cocci. There are 67 cases on record and Klieneberger now reports another. He attributes the etiology in this case to the simultaneous administration of potassium iodid and calomel to a patient, a man of 67, suffering from acute exacerbation of chronic bronchitis, with emphysema. He had never presented any symptoms of gastric derangement and he took only 3.5 gm. of the potassium iodid in all. It was suspended as symptoms of iodin intoxication developed, including severe gastric disturbances. Eight hours after the last dose of the iodid .3 gm. of calomel was given. The patient died in thirty-six hours, and at the autopsy diffuse phlegmonous gastritis was discovered.

142. **Gonorrheal Affections of the Eyes in Adults.**—The case described was distinguished by the metastatic affection in the eyes after six years of latency, and simultaneous involvement of all the joints and the tendon sheaths of one foot.

143. **Fate of Tubercle Bacilli in Heated Milk.**—Rullmann announces that tubercle bacilli heated in milk to 65 C. (150 F.) for more than thirty minutes, were still virulent enough to infect guinea-pigs in intraperitoneal inoculation. The milk was infected with sputa.

Books Received.

Acknowledgment of all books received will be made in this column, and this will be deemed by us a full equivalent to those sending them. A selection from these volumes will be made for review, as dictated by their merits, or in the interests of our readers.

PRACTICAL MEDICINE SERIES OF YEAR BOOKS. Comprising Ten Volumes of the Year's Progress in Medicine and Surgery. Under the Editorial Charge of Gustavus P. Head, M.D., Professor of Laryngology and Rhinology, Chicago Postgraduate Medical School. Volume VIII. Materia Medica and Therapeutics, Preventive Medicine, Climatology, Suggestive Therapeutics and Forensic Medicine. Edited by George F. Butler, Ph.G., M.D.; Henry B. Favill, A.B., M.D.; Norman Bridge, A.M., M.D.; Daniel R. Brower, M.D., and Harold N. Moyer, M.D. Cloth. Pp. 326. Price, $1.50. Chicago: The Year Book Publishers. July, 1903.

QUANTITATIVE CHEMICAL ANALYSIS. Adapted for Use in the Laboratories of Colleges and Schools. By Frank Clowes, D.Sc. Lond., Emeritus Professor of Chemistry in the University College, Nottingham, and S. Bernard Coleman, A.R.C.Sc. Dublin, Professor of Chemistry in the Southwestern Polytechnic, Chelsea, S. W. Sixth Edition. Cloth. Pp. 602. Price, $3.50 net. Philadelphia: P. Blakiston's Son & Co. 1903.

TREASURY DEPARTMENT. Public Health and Marine-Hospital Service of the United States. Hygienic Laboratory—Bulletin No. 15. Inefficiency of Ferrous Sulphate as an Antiseptic and Germicide. By Allan J. McLaughlin. Paper. Pp. 7. Washington: Government Printing Office. 1903.

The Public Service.

Army Changes.

Movements of Officers of the Medical Department, U. S. Army, under orders from the Adjutant-General's Office, Washington, D. C., for the week ending Saturday, Aug. 29, 1903:

Heizmann, Charles L., colonel and assistant surgeon-general, and Major Willim H. Arthur, surgeon, are detailed as members of the board of medical officers appointed by paragraph 26, S. O. 65, March 19, 1903, A. G. O., for the examination of candidates for admission to the medical corps of the Army, vice Brigadier-General Calvin DeWitt, U. S. A., retired, and Major Louis A. La Garde, surgeon, relieved.

McCulloch, Jr., C. C., captain and asst.-surgeon, in addition to his present duties as attending surgeon and examiner of recruits in New York City, is assigned to duty as medical superintendent of the transport service in that city.

Porter, R. S., first lieut., is detailed as a member of the examining board at Fort Leavenworth, vice First Lieut. W. M. Smart.

Navy Changes.

Changes in the Medical Corps of the Navy for the week ending Aug. 29, 1903:

Asst.Surgeon E. M. Brown, detached from the Naval Hospital, Newport, and ordered to the *New York*.

Surgeon M. S. Elliott, detached from the *New York* and ordered home to wait orders.

Surgeon N. H. Drake, detached from the *New York* and ordered to the *Maine*.

Surgeon D. O. Lewis, ordered to the *New York* as fleet surgeon of the Pacific Squadron.

P. A. Surgeon H. C. Curl, detached from the Naval Hospital, Mare Island, Cal., and ordered to the *New York*.

Surgeon W. R. DuBose, detached from the *Maine* and ordered to duty in the Bureau of Medicine and Surgery.

Surgeon J. F. Murphy, detached from the *Monocacy* and ordered to the *Wisconsin*.

Asst.-Surgeon J. C. Thompson, detached from the *Chesapeake* and ordered to the Naval Academy.

Marine-Hospital Changes.

Official list of the changes of station and duties of commissioned and non-commissioned officers of the Public Health and Marine-Hospital Service for the seven days ended Aug. 20, 1903:

Surgeon C. E. Banks, granted three days' leave of absence from August 8, under paragraph 189 of the Regulations.

Surgeon D. A. Carmichael, Bureau order of Aug. 10, 1903, directing him to report to director of laboratory for special instructions, amended so that he shall report at the laboratory for temporary duty.

P. A. Surgeon J. C. Perry, relieved from temporary duty in the Bureau and directed to report to the director of the laboratory for duty.

P. A. Surgeon M. J. Rosenau, granted leave of absence for seven days from August 19.

P. A. Surgeon J. A. Nydegger, granted leave of absence for one month from August 13 on account of sickness.

P. A. Surgeon H. W. Wickes, leave of absence for one day granted by Bureau telegram of August 13 revoked.

P. A. Surgeon H. B. Parker, relieved from special temporary duty at Vera Cruz, Mexico, to date from July 22. Granted leave of absence for seven days from August 19.

Asst.-Surgeon T. B. McClintic, to report to director of the laboratory for duty, to take effect Aug. 1, 1903.

Asst.-Surgeon C. W. Wille, relieved from duty at the laboratory, to take effect August 3. Detailed as inspector of unserviceable property at Baltimore.

A. A. Surgeon J. M. Delgado, granted extension of leave of absence for seven days from August 12.

A. A. Surgeon J. P. C. Foster, granted leave of absence for seven days from August 19.

A. A. Surgeon C. M. Frissell, Department letter of Aug. 6, 1903, granting him leave of absence from August 6 to 18, amended to read from August 10 to 25.

A. A. Surgeon F. J. Schug, granted leave of absence for ten days from August 15.

A. A. Surgeon A. E. Spohn, granted leave of absence from July 26 for thirty days.

APPOINTMENTS.

Jamin H. Hamilton, appointed acting assistant surgeon for duty at Richford, Vt.

Stacy D. Williamson, appointed acting assistant surgeon for duty at Malone, N. Y.

PROMOTIONS.

Asst.-Surgeons L. D. Fricks, V. G. Heiser and M. J. White commissioned (recess) as passed assistant surgeons, to rank as such from Aug. 2, 3 and 4, respectively, 1903.

Health Reports.

The following cases of smallpox, yellow fever, cholera and plague have been reported to the Surgeon-General, Public Health and Marine-Hospital Service, during the weeks ended Aug. 22 and 29, 1903:

SMALLPOX—UNITED STATES.

California: Los Angeles, Aug. 8-15, 1 case; Sacramento, Aug. 1-8, 1 case; San Francisco, Aug. 2-16, 3 cases.
Colorado: Denver, July 11-25, 10 cases.
Illinois: Belleville, Aug. 15-22, 1 case; Chicago, Aug. 1-8, 15-22, 28 cases, 2 deaths.
Louisiana: New Orleans, Aug. 15-22, 1 case, imported.
Massachusetts: Fall River, Aug. 8-22, 9 cases; Taunton, Aug. 1-8, 15-22, 5 cases.
Michigan: Detroit, Aug. 8-15, 1 death; Grand Rapids, Aug. 15-22, 1 case; Port Huron, Aug. 8-22, 3 cases.
Minnesota: Minneapolis, July 27-Aug. 3, 1 case; in 7 counties at 11 localities, 29 cases, 1 death.
Missouri: St. Louis, Aug. 15-22, 4 cases.
Nebraska: Omaha, Aug. 8-15, 2 cases.
New Jersey: Hudson County, Aug. 16-23, 1 case.
Ohio: Cleveland, Aug. 8-15, 1 case; Dayton, Aug. 8-22, 3 cases; Hamilton, July 11-18, 1 case, should have been reported July 6; Toledo, Aug. 8-15, 1 case.
Pennsylvania: Allegheny, Aug. 10-17, 2 cases; Pittsburg, July 25-Aug. 15, 135 cases, 31 deaths, 1 case imported; Scranton, Aug. 8-15, 1 case.
West Virginia: Wheeling, June 1-30, 9 cases, 3 deaths.
Wisconsin: Milwaukee, Aug. 1-8, 3 cases.

SMALLPOX—FOREIGN.

Austria: Prague, July 18-Aug. 8, 8 cases.
Belgium: Antwerp, July 26-Aug. 8, 5 cases, 2 deaths; Brussels, July 26-Aug. 8, 3 deaths.
Brazil: Rio de Janeiro, July 12-26, 13 deaths.
Chile: Amtofogasta, June 1-30, 5 cases, 3 deaths.
China: Shanghai, July 7-14, 1 case, 1 death.
Colombia: Bocas del Toro, July 28-Aug. 4, 1 death.
Germany: Bremen, July 26-Aug. 1, 1 case, 1 death, emigrant.
Great Britain: Birmingham, July 26-Aug. 8, 3 cases, 1 death; Dublin, July 26-Aug. 15, 1 case, 1 death; Dundee, July 18-Aug. 8, 4 cases; Leeds, July 26-Aug. 8, 11 cases, 3 deaths; Liverpool, Aug. 1-15, 13 cases, 3 deaths; London, July 26-Aug. 8, 4 cases; Manchester, July 26-Aug. 8, 4 cases, 1 death; Newcastle-on-Tyne, July 19-Aug. 8, 13 cases, 3 deaths; Nottingham, July 25-Aug. 1, 6 cases; Sheffield, July 26-Aug. 8, 3 cases.
India: Bombay, July 1-28, 24 deaths; Calcutta, July 11-18, 2 deaths.
Mexico: City of Mexico, July 18-Aug. 16, 36 cases, 17 deaths; Hermosillo, Aug. 11, epidemic; Magdalena, Aug. 11, epidemic; Tegucigalpa, Aug. 15, present.
Russia: Moscow, July 18-Aug. 1, 4 cases, 2 deaths; Odessa, July 26-Aug. 1, 1 case; St. Petersburg, July 18-Aug. 1, 10 cases, 2 deaths; Warsaw, June 20-July 18, 8 deaths.
Turkey: Smyrna, June 21-July 19, 16 deaths.

SMALLPOX—INSULAR.

Philippine Islands: Manila, June 13-July 11, 9 cases.

YELLOW FEVER.

Brazil: Rio de Janeiro, July 12-26, 4 deaths.
Colombia: Panama, Aug. 3-17, 6 cases, 2 deaths.
Costa Rica: Limon, July 30-Aug. 13, 3 cases, 4 deaths.
Ecuador: Guayaquil, July 18-25, 1 death, sporadic.
Mexico: City of Mexico, Aug. 8-16, 1 case, 1 death; Linares, Aug. 26, epidemic; Merida, Aug. 1-12, 10 cases, 5 deaths; Tampico, Aug. 8-15, 14 cases; Vera Cruz, Aug. 8-15, 53 cases, 15 deaths.

CHOLERA—INSULAR.

Philippine Islands: Manila, June 20-July 11, 21 cases, 17 deaths; Provinces, June 20-July 11, 1,486 cases, 1,003 deaths.

CHOLERA—FOREIGN.

China: Hongkong, July 8-15, 1 death.
India: Bombay, July 14-28, 2 deaths; Calcutta, July 11-25, 39 deaths.
Straits Settlements: Singapore, June 20-July 4, 3 deaths.

PLAGUE—INSULAR.

Philippine Islands: Manila, June 13-July 11, 19 deaths.

PLAGUE—FOREIGN.

Africa: Cape Colony, June 20-27, 5 cases.
Brazil: Rio de Janeiro, July 12-26, 2 deaths.
Egypt: General, July 11-18, 27 cases, 9 deaths.
China: Amoy, June 11-18, 840 deaths, estimated; Funchau, July 8-15, becoming epidemic; Hongkong, July 8-27, 87 cases, 64 deaths.
India: Bombay, July 14-28, 143 deaths; Calcutta, July 11-25, 17 cases; Karachi, July 12-26, 2 cases, 1 death.
Mexico: Bagio, Aug. 17, 3 cases; Sequeros, Aug. 18, 3 cases.